DOCUMENT RESUME

ED 366 772 CE 065 614

AUTHOR	Lovelace, Bill E.; LaBrecque, Suzanne V.
TITLE	Assessment of Competency-Based Instruction. Final Report. Volumes I-II.
INSTITUTION	North Texas Univ., Denton.
SPONS AGENCY	Texas Higher Education Coordinating Board, Austin. Div. of Community and Technical Colleges.
PUB DATE	30 Jun 93
NOTE	524p.; For the summary report, see CE 065 613. The Instructor's Questionnaire is slightly cropped along the right hand margin.
PUB TYPE	Reports - Research/Technical (143) -- Statistical Data (110)
EDRS PRICE	MF02/PC21 Plus Postage.
DESCRIPTORS	Administrator Attitudes; *Community Colleges; *Competency Based Education; *Educational Assessment; Models; Pilot Projects; Public Colleges; Questionnaires; State Surveys; *Statewide Planning; Tables (Data); Teacher Attitudes; *Technical Institutes; Two Year Colleges; *Vocational Education
IDENTIFIERS	*Texas

ABSTRACT

A statewide assessment process was designed and pilot tested to determine the extent to which competency-based instruction (CBI) has been implemented in vocational-technical education programs and courses in all public community and technical colleges in Texas. The final report consists of two volumes. Volume I contains the rationale (Introduction), procedures, an overview of the presentation of findings, and the summary, conclusions, and recommendations of the project. Volume II presents the responses to the assessment made for each reporting technical education instructional program area and the evaluation model developed by the project. Instructors and program directors from 40 community and technical colleges participated in the assessment, which was designed and conducted by the University of Texas. More than 50% of the responding institutions had implemented 45 of the 52 required characteristics of CBI, and 15 of the 52 characteristics had been implemented by more than 90% of the institutions. The biggest barriers to implementation of CBI were faculty members' fears that CBI will make new demands on their time, no provision of release time for faculty to develop a CBI system format, and few state-provided incentives for development and maintenance of CBI. (Volume I contains the rationale and procedures of the assessment, an overview of the findings, the survey instruments, project summary, project conclusions, and recommendations. Volume II contains 96 tables detailing instructors' and program directors' responses regarding the degree of CBI implementation by program area and barriers to CBI implementation by instructional program area, and the assessment model.) (MN)

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FINAL REPORT

ASSESSMENT OF COMPETENCY-BASED INSTRUCTION

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FINAL REPORT

VOLUME I

ASSESSMENT OF COMPETENCY-BASED INSTRUCTION

Bill E. Lovelace
Suzanne V. LaBrecque

Sponsored By:

The Texas Higher Education Coordinating Board
Community and Technical Colleges Division
Austin, Texas

Conducted By:

The University of North Texas
School of Merchandising and Hospitality Management
Denton, Texas

June 30, 1993

FUNDING INFORMATION

Project Title: Assessment of Competency-Based Instruction

Coordinating Board Project Number: 33130001

Funding Source: Public Law 101-392, Title II A
Texas Higher Education Coordinating Board

Coordinating Board Staff Advisor: Dr. Bob Lahti, Program Director
Community and Technical Colleges Division
Texas Higher Education Coordinating Board
Austin, Texas

Project Staff: Dr. Suzanne V. LaBrecque, Administrator
Dr. Bill E. Lovelace, Project Director
Paige Parsons, Research Assistant
School of Merchandising and Hospitality Management
University of North Texas
Denton, Texas

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ACKNOWLEDGEMENTS

The project staff expresses sincere appreciation to the following individuals who provided guidance and expertise to the project staff by serving as members of the project advisory committee.

Dr. Bill Barnes
Texas State Technical College
Sweetwater, Texas

Ms. Shirley Chenault
Weatherford College
Weatherford, Texas

Dr. Barbara Eubanks
Collin County Community College
McKinney, Texas

Mr. Victor Fuhro
U.T. at Brownsville
Brownsville, Texas

Dr. Bob Lahti
Texas Higher Education
Coordinating Board
Austin, Texas

Dr. Ron Johnston
Panola College
Carthage, Texas

Mr. A.L. Pollard
McLennan Community College
Waco, Texas

Dr. Gary Stretcher
Frank Phillips College
Borger, Texas

Dr. Jerry Wilson
Lamar University
Beaumont, Texas

We appreciate the assistance provided to the project by the individuals who assisted in identifying the characteristic of a Gender Equity Program by responding to a Delphi study. The individuals who served as panelist for the Delphi study were:

Dr. Bill Barnes
Texas State Technical College
Sweetwater, Texas

Ms. Shirley Chenault
Weatherford College
Weatherford, Texas

Dr. Barbara Eubanks
Collin County Community College
McKinney, Texas

Mr. Victor Fuhro
U.T. at Brownsville
Brownsville, Texas

Dr. Ron Johnston
Panola College
Carthage, Texas

Mr. A.L. Pollard
McLennan Community College
Waco, Texas

ACKNOWLEDGMENTS (CON'T)

Dr. Gary Stretcher
Frank Phillips College
Borger, Texas

Dr. Jack Foreman
Texas State Technical
College-Marshall
Marshall, Texas

Jerry Wilson
Lamar University
Beaumont, Texas

Dr. Eugenia Travis
Northeast Texas
Community College
Mt. Pleasant, Texas

We are also grateful to each of the dean/directors at each of the community and technical colleges. The deans/directors greatly assisted the project staff by distributing and collecting the individual questionnaires at their respective campuses. Special appreciation is extended to Mr. Don Taylor who served as the third party evaluator of the project's installation, process, and products.

EXECUTIVE SUMMARY

Need

The Texas Higher Education Coordinating Board has determined that there is a need to design and pilot a statewide assessment process to determine the extent to which competency-based instruction has been implemented in vocational/technical education programs and courses in all public community and technical colleges in Texas. The University of North Texas proposes to conduct the needed assessment as described below.

Objectives

A. Create and use a Project Advisory Committee.
B. Develop workshop instructional content that is competency-based and designed to increase and/or develop knowledge and skills needed by special populations coordinators to ensure that special populations students enrolled or seeking to enroll in technical/vocational programs are provided adequate services and job skill training.
C. Conduct a series of instructional workshops for special populations coordinators and staff responsible for delivering special populations services in Texas two-year public postsecondary institutions.
D. Evaluate the project in terms of project installation, process, and products.
E. Prepare and Submit Reports.

Procedures

1. Create and use a Project Advisory Committee (PAC)
2. Conduct an information search
3. Establish knowledge/competency statements for individuals assigned the responsibility for performing the mandated functions for a special populations coordinator
4. Develop instructional content that is based on the knowledge/competency statements established in Task 3
5. Select and train cadre for conducting workshops
6. Publicize project and workshops
7. Conduct and evaluate workshops
8. Evaluate the project
9. Prepare and submit reports

Products

A final comprehensive report of the project which will include a description of the procedures, the findings of the assessment by program areas, conclusions and recommendations, and the report of a third party evaluator. 100 copies of the summary report of the findings of the assessment by program areas will be printed and disseminated.

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I. INTRODUCTION

Background

The use of a competency-based curricula and the delivery of the curricula is supported by both mandate and implied mandate. The Technical and Vocational Program Guidelines of the Texas Higher Education Coordinating Board advocates the use of competency-based curricula and instruction. The Guidelines provide the following definition:

> Competency-based education is designed to teach job related clusters of skills and knowledge, the mastery of which forms the basis upon which the student is evaluated; competency-based programs must possess the following characteristics:
>
> 1. Involvement of business and industry in the determination of the job competencies and the expected performance level required for successful employment within a defined job or cluster of jobs.
>
> 2. Course sequence which allows the mastery of competencies leading to the satisfactory performance of all identified competencies.

The above definition clearly directs that the curriculum and instructional content of postsecondary occupational preparation programs shall be competency-based.

Competency-based instruction in technical and vocational education has been described as an instructional delivery system that provides a process by which students develop measurable performance competencies, specified by business and industry, that will assist students in obtaining gainful employment based on their ability to perform in a productive manner.

Student achievement is measured by *demonstration* of mastery of competencies- rather than *performance* on written tests and subsequent comparison to the performance of other students. Students are held accountable for mastery of each competency and may progress at their own rate.

A review of final reports of program improvement projects funded by the Coordinating Board reveals progress has been made in the achievement of developing competency-based curricula that adhere to the two characteristics of CBI specified in the CB definition of competency-based education above. Other characteristics of competency-based instruction include:

- **Performance objectives are developed for the program.** There is one performance objective developed for each task/competency. In addition, enabling objectives are sometimes developed for each performance objective.
- **The student is informed of the required competencies prior to instruction.** The specific requirements and content of the program, course, and performance objective are provided to the student prior to instruction.
- **Student achievement is based on demonstration of mastery of specified competencies.**
- **Criterion-referenced testing procedures are used to evaluate student progress and performance.**
- **Student competency profiles are maintained for purposes of program articulation, student application for employment, and permanent records.**
- **Learning time is flexible.**
- **Learning is guided by feedback.**

A competency-based instructional system is designed for the delivery of a competency or student-outcome driven curriculum that will:

- Clearly state exactly what is to be learned (specifies what competencies are to be mastered);
- Provide high quality instruction;
- Assist students to learn one competency well before progressing to the next; and
- Require each student to demonstrate mastery of the competency.

The concept for implementing a competency-based curriculum using competency-based instruction was emphasized by researchers and many state education agencies in the 1970s. This emphasis began to decline in the late 70s due to the emphasis of other things such as the educational reform movement and the movement to return to the "basics."

With the demands of business and industry for entry-level employees with competencies they need, national concern for educational accountability, and the need to serve special populations without "diluting" the curriculum, the concept of competency-based instruction is receiving considerable attention again. As we have seen with the use of buzzwords in other innovations and concepts, it has been popular to talk about competency-based instruction with enthusiasm even if it has not been well understood. Postsecondary technical and vocational education personnel in texas are moving away from the conversational use of the concept and are in the process of moving toward a phase of design, actualization, and implementation of a competency-based instruction system.

The participant evaluations of the CBI workshops conducted by Northeast Texas Community College attest to value and benefits of using a competency-based instruction system for increasing student achievement in both occupational courses and supporting academic courses of the occupational program.

In the report of the STATE ASSESSMENT, for Section 116 of the Perkins Act, prepared by the Texas Higher Education Coordinating Board, there were two recommendations that support and can use competency-based instruction in the achievement of the two recommendations. The two recommendations made for *Criteria*

Factor II: Sequential courses of study leading to both academic and occupational competencies are:

3. Public community colleges and technical institutes should develop a periodic review process to ensure that applied basic work skills are incorporated into the curriculum of each technical program.

4. Public community colleges and technical institutes should develop a periodic assessment to ensure that competency-based instruction is incorporated in all programs.

The achievement of recommendation "4" stated above will require the development of a model that can be used by individual institutions for the periodic assessment of competency-based instruction.

The Carl D. Perkins Vocational and Applied Technology Education Act Amendments of 1990, P.L. 101-392, supports the use of competency-based instruction (CBI) to meet the requirements for using Perkins funds as shown by the following citations:

In reference to accountability by state and local standards and measures.

> *Sec. 115. (b), (1) measures of learning and competency gains, including student progress in the achievement of basic and more advanced academic skills;*

A great number of individuals have interpreted this requirement to mean that "*measures of learning and competency gains*" pertain only to basic and academic skills. A review of the working papers and the agreement of the conference committees of the House and Senate reveals the following from the Senate and agreed to by the House: "...; includes measures of learning and competency gains in both academic achievement and vocational skills competencies;..."

The implied requirement for a competency-based curriculum and a CBI delivery system is shown in Sec. 115, (f) Report, (2):

> *An assessment of the validity, predictiveness, and reliability of such standards and measures, unbiased to special populations, in the areas of academic achievement, vocational skill competencies, employment outcomes, and postsecondary continuation and attainment;...*

The definition of "vocational education" stated in PL 101-392 (Perkins Act) implies a mandate for a CBI system by this statement in the definition:

> *Such programs shall include competency-based applied learning....*

The TEXAS STATE PLAN FOR VOCATIONAL AND APPLIED TECHNOLOGY EDUCATION, FISCAL YEARS 1992-1994 (State Plan) outlines and describes how Perkins funds will be used by eligible secondary and postsecondary institutions in Texas to make Texas and the United States *more competitive in the world economy by developing more fully the academic and occupational skills of all segments of the population.*[1]

Postsecondary objectives in the State Plan (1992-1993 Goals) that will specifically require the implementation of a CBI system are:

> "1., b). defining and teaching competencies which reflect the needs of employers;" and

> "5. To integrate academic competencies in all technical-vocational programs."

The Master Plan - A MASTER PLAN FOR VOCATIONAL AND TECHNICAL EDUCATION, 1991 Update of PART II, does not specifically address or advocate competency-based instruction. However, there are indications that the Master Plan encourages the use of CBI by following statements found under Goal IV: **Improve the**

---

[1] Sec. 2 Statement of Purpose, PL 101-392

quality of technical education instruction, counseling, management and leadership resulting in increased successful outcomes of students.:

1) "Development of institutional policies on assessment and revision of technical education instructional process [IHE];"

2) "Number and percent of technical students able to pass competency tests relative to skills attained in courses [IHE]."

The assessment of competency-based instruction will assist the CB in complying with Sec. 201. State Programs and State Leadership of PL 101-392. Specifically, they will be meeting the requirements for 201.(a) and 201.(b),3, which states:

> *"(3) assessment of programs conducted with assistance under this Act, including the development of ---*
> *(A) ...; and*
> *(B) program improvement and accountability with respect to such programs."*

Need

Based on the above background information, it was determined that there was an immediate need for a statewide assessment to determine the extent to which a competency-based instructional system has been implemented for the delivery of occupational preparation programs in Texas public community and technical colleges.

Significance of the Study

In order to make decisions at the state level for continued assistance to public postsecondary institutions, the assessment of competency-based instruction must collect information that will produce;

- A list of validated characteristics of a competency-based instructional system.
- A proven process or system for the formative evaluation or assessment of competency-based instruction.

- A list of barriers that inhibit the implementation of competency-based instruction.

- The status of competency-based instruction, on a statewide basis, of postsecondary technical/vocational programs and courses.

- An awareness by faculty and administrators of the acceptable minimum characteristics or criterion for evaluating competency-based instruction.

- A list of recommendations for improving the status of competency-based instruction if the findings from the discrepancy analysis show that there are needs for improvement.

The results of the assessment will have the following uses:

- The CCTC Division staff of the CB will have documented information that will assist them in identifying and supporting state leadership activities that will assist local institutions in the expansion and improvement of competency-based instruction.

- Local institutions will be able to use the findings of the assessment and recommended strategies for improving competency-based instruction at the local level.

- Local institutions can use the developed and piloted assessment (evaluation) process to periodically identify what should be done to improve competency-based instruction locally and to ensure that competency-based instruction is incorporated in all programs.

Project Goals and Objectives

The goal of this project was:

To design and pilot a statewide assessment process or model that can be used to determine the extent of the use of competency-based instruction by all technical/vocational education programs and courses in all public community and technical colleges.

The objectives of the project were:

A. Create and use a project advisory committee with membership representing a community college or technical college from each of the Texas Higher Education Regions.

B. Establish characteristics of competency-based instruction that are: 1) essential to complying with federal and state mandates and implied mandates for competency-based instruction and competency attainment; and 2) appropriate for adaptation using current resources of local institutions and resources available from the CCTC Division of the Coordinating Board.

C. Design, develop, and pilot a statewide assessment model that will determine the status of the use of competency-based instruction in the delivery of postsecondary technical/vocational education.

D. Develop and implement a dissemination plan for publicizing the project and distributing the project products.

E. Evaluate the project in terms of project installation, process, and products using internal and external input.

II. PROCEDURES

The primary focus of any educational evaluation (assessment) is to determine the status of an educational system or a specific component or process within an educational system. Unless specifically defined as to purpose, assessment in education is most often used to refer to a process of gathering information for the purpose of making decisions.

In the development and implementation of an assessment activity or program, the planners must define their terms very carefully and specify the purposes of the assessment to be conducted. Before any assessment activities are planned, there are two important assumptions that should be considered.

One assumption that can be made is that the planned assessment can obtain information that is needed and has not been compiled and is not readily available elsewhere. Therefore, the question that became important for this specific assessment project is: "Has a methodology been developed and proven to produce the specific information that the proposed assessment project is expected to obtain?"

The second assumption which can be made is that the information obtained be the assessment can and will be used by the decision makers to improve the educational component or process being assessed. The ultimate design of any assessment is dependent upon the specific purpose of the assessment.

This assessment was designed to *determine the extent to which competency-based instruction in vocational/technical education programs and courses in all public community and technical colleges has been implemented.*

Assessment is formative evaluation. Formation evaluation or assessment is normally done by collecting data that is quantitative. The assessment is conducted to gather specified information about status and comparing the findings or analyzed status information with predetermined goals, objectives, or characteristics of program, component, or process being assessed.

An assessment program or project must include a process for "discrepancy analysis" which will pinpoint the specific purpose for which the assessment is made. The analysis of information collected by the formative evaluation or assessment must be able to identify "what is" and compare the "what is" with the "what should be" or desired status that describes the characteristics or measures of a prestated goal or objective.

Determining the status of CBI in Texas postsecondary technical/vocational programs, by assessment, will enable the CCTC Division to develop state programs or state leadership activities that will assist the postsecondary institutions in planning and implementing a mandated and quality competency-based instructional system throughout Texas.

The five objectives of this project were achieved by the performance of ten tasks which are described in the following narrative:

Task 1. Establish and Use a Project Advisory Committee (PAC)

In order to obtain external input and expertise from other institutions, agencies, and organizations that support or will benefit from the project, a Project Advisory Committee was established and used. Linkages for input to the project with representative groups that are involved in planning, implementing, and evaluating competency-based instruction were essential.

Due to the geography of Texas, it was important that the PAC membership provide for input from each of the eight Higher Education Regions. The PAC was composed of eight (8) voting members and one (1) non-voting member (ex-officio). The nine (9) member committee included: 1) eight persons representing a community/ junior or technical college; 2) one person from the Texas Higher Education Coordinating Board serving as CB Staff Advisor and ex-officio member. The names of the PAC members were presented in the acknowledgements of this report.

The PAC members served in three major roles for the project: (1) as an advisory body to the project staff in conducting the project; (2) serve as reviewers and make recommendations for finalization of a survey instrument, interim reports and products, and final project products; and (3) assist in the evaluation of the project.

The PAC met two times for carrying out their responsibilities to the project. The agendas and reports of the PAC meetings are presented in Appendix A.

Following the orientation meeting, all other communications between the project and the PAC members were conducted by mail or telephone.

Task 2. Conduct an Informational Search

A very comprehensive and thorough search of the literature and other informational sources were essential for this project. The search for information was conducted to identify and present, in a positive manner, the issues, concerns, conceptual models, and procedures for developing, testing, and implementing a competency-based instructional system. The specific purpose of this search for information and review of literature was to identify characteristics of competency-based instruction that could be used as evaluation or assessment criteria for the assessment model. A secondary purpose of the search was to identify strategies and additional information that will enhance the achievement of each task being performed in the project.

Task 3. Establish Characteristics of a Competency-Based Instructional System

Since the Texas Higher Education Coordinating Board (CB) had not established performance measures and standards for the evaluation of competency-based instruction, it was necessary to establish a list of characteristics of a competency-based instruction system.

A listing of required competency-based instruction characteristics were established for use as questionnaire items for the assessment. The list of characteristics were established using a modified Delphi technique. The results of the final round of the Delphi is presented in appendix B. The required characteristics of a competency-based instruction system established by the Delphi were then placed on the assessment questionnaire.

Task 4. Design and Develop a Model for Evaluating Competency-Based Instruction

The model developed by this project was designed to serve two purposes. The model was designed for: 1) use by the Coordinating Board to assess or determine the extent (status) that competency-based instruction is used for all technical/vocational programs conducted by Texas public community and technical colleges and 2) use by local community and technical colleges in evaluating the effectiveness of competency-based instruction.

As a model for local evaluation, the institutions can use the model to identify problem areas so that improvements can be made. As a model for statewide assessment, the Coordinating Board will be able to identify on a periodic basis what state leadership activities (discretionary projects) and technical assistance should be provided to local institutions for the improvement of competency-based instruction. A copy of the model is presented in Volume II of this report.

Task 5. Develop a Plan to Pilot the Model

Based on the review of the literature and previous experience of the project staff, a plan was developed which included the activities described below for piloting the approved model for assessing competency-based instruction on a statewide basis.

Survey questions were developed using the established characteristics of competency-based instruction as criteria for assessment. This assessment criteria was designed to determine the extent to which competency-based instruction had been implemented for all technical/vocational programs on a statewide basis.

Other research questions were formulated to identify barriers that had prevented the use of competency-based instruction at the local level. The questions which were asked to determine the answers were related to the following categories:

- What barriers to implementing CBI are related to material factors?
- What barriers to implementing CBI are related to faculty and staff factors?
- What barriers to implementing CBI are related to organizational factors?

The assessment questionnaire was prepared for mailing to: deans/directors of postsecondary occupational education programs; program chairs/leaders; and instructors of occupational programs. The questionnaires were mailed to the occupational education deans/directors at sixty-nine public community and technical college campuses. The dean/director at each campus distributed the questionnaires to each occupational program chair/leader and to one instructor of each occupational preparation program. An example of the assessment questionnaires mailed to the deans/directors are presented in appendix C. Forty community and technical colleges participated in the assessment. A list of the community and technical colleges participating in the statewide assessment of competency-based instruction is presented in appendix D.

Task 6. Conduct Pilot and Analyze Responses

The pilot was conducted using the plan and the questionnaires approved by the PAC. Prior to the mailing of the questionnaires, each dean/director of occupational education was surveyed to determine the number of program/division chairs and the number of occupational (technical/vocational) programs being conducted by the campus for which the dean/director is responsible. Information from this survey was used to identify the number of questionnaires that will be needed for each campus.

All of the questionnaires for each campus were mailed to the respective dean/director. The dean/director was asked to distribute and collect the questionnaires used for conducting the assessment on the campus. A plain envelope was attached to each questionnaire so that the responses of each respondent would be confidential. Placing the name of the respondent on the completed questionnaire was at the option of the respondent.

As the questionnaires were returned, the responses were entered into the computer by: 1) population responding; 2) program area; and 3) by campus. The use of the campus identity will be done only for the purpose of follow-up and for requests for computer analysis of the campus responses when made by the respective dean/director.

The responses to all of the questionnaires were analyzed and reported as a state assessment. Findings of the analysis were reported by program area and across all program areas on a statewide basis.

Task 7. Prepare and Print Summary Report

A summary report was prepared of the results of the assessment. One hundred copies of the summary report were printed for dissemination. Twenty copies of the summary report were mailed to the Coordinating Board.

Task 8. Develop and Implement an Information Dissemination Plan

Creating awareness and understanding of the project and dissemination of the products are crucial to the long term benefits of the project. If the proposed benefits and results of the project are to be realized, the targeted audiences must be informed of the project's findings. A dissemination plan was prepared and implemented that resulted in a summary report of the project findings being mailed to each of the Dean/Directors of occupational education program in the state.

Task 9. Evaluate the Project

Evaluation of the project was performed by a third party evaluator. The evaluation report is presented in Appendix E.

Task 10. Prepare and Submit Reports

In addition to the final project report and other reports required by the Coordinating Board, quarterly progress reports and interim deliverables related to project products were submitted by the principal investigator (project director) to the CB project advisor and/or third party evaluator.

III. PRESENTATION OF FINDINGS

This chapter presents an overview of the findings of the statewide assessment of competency-based instruction in Texas public two-year community and technical colleges. This overview, with the exception of the tables presenting the findings by individual program area, were compiled and disseminated in a summary report. The findings are presented in terms of the perceptions of: the deans/directors of all programs; the chairs/leaders of specific programs; instructors of specific programs; chairs/leaders across all programs; instructors across all programs; and all respondents to the questionnaires.

Deans/Directors of All Occupational Programs

The responses of the deans/directors for all occupational program are shown in Table 1. Table 1 reveals that more than fifty-percent of the responding institutions had implemented forty-five of the fifty-two characteristics of a competency-based instructional system. It was found, based on the responses of the deans/directors, that fifteen of the fifty-two of the required characteristics had been implemented by more than ninety percent of the respondents.

Table 1 reveals that responses from the deans/directors placed questionnaire item 39 as one of the least implemented characteristic. Questionnaire item 39, "A copy of the student's competency profile is included in the student's permanent record", had been implemented only sixteen percent of the respondents. The required characteristic "Students exiting a program are provided with a copy of their competency profile" had been implemented by fourteen percent of the respondents.

The respondents were requested to rate the degree of implementation of the fifty-two characteristics on a scale of "1" to "5" with "1" being a minimum implementation

TABLE 1

Implementation of Competency-Based Instruction Across All Program Areas as Perceived by Deans/Directors of Postsecondary Occupational Education Programs

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	97.30%	3
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	70.27%	3
3	The occupational competencies are sequenced for instructional purposes.	94.59%	3
4	The occupational competencies are clustered for course development.	89.19%	3
5	Occupational program courses are named and described.	100.00%	4
6	The prerequisite courses are identified and listed.	97.30%	4
7	The support courses are identified and listed.	97.30%	4
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	97.30%	3
9	Legitimate or validated career ladder exit points are identified in the curriculum.	86.49%	3
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	100.00%	4
11	Occupational competency profiles are developed for the occupational curriculum (program).	72.97%	3

TABLE 1

	Characteristics:	Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	97.30%	3
13	Objectives are written in performance terms for each occupational task.	81.08%	3
14	Enabling objectives are written for each task performance objective.	56.76%	3
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	97.30%	3
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	94.59%	3
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	78.38%	3
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	78.38%	3
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	89.19%	3
20	The student is informed of the required competencies and/or tasks prior to instruction.	94.59%	3
21	Learning time is flexible.	62.16%	2
22	Learning is guided by feedback.	94.59%	3
23	Students are informed of performance measures in advance of instruction for each task.	83.78%	2

TABLE 1

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	89.19%	2
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	72.97%	2
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	56.76%	2
27	Students are required to perform each task in a joblike setting.	64.86%	3
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	81.08%	2
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	91.89%	2
30	The instructor is a manager and facilitator of learning.	97.30%	3
31	The delivery of instruction is appropriate for the different learning styles of students.	91.89%	2
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	70.27%	2
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	56.76%	2
34	Task and competency progress records are maintained for each student.	56.76%	2

TABLE 1

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	78.38%	3
36	Student progress is determined by criterion-referenced measurement.	70.27%	2
37	Competency Profiles are kept current for each student.	40.54%	2
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	78.38%	2
39	A copy of the students' competency profile is included in the students' permanent records.	16.22%	2
40	Students exiting a program are provided with a copy of their competency profile.	13.51%	2
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	45.95%	2
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	64.86%	2
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	32.43%	2
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	72.97%	3
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	70.27%	3
46	The competency exams are totally performance measured.	37.84%	2

TABLE 1

	Characteristics:	Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	75.68%	2
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	40.54%	2
49	Criteria for passing performance tests are acceptable for on-the-job performance.	78.38%	2
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	75.68%	2
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	59.46%	2
52	The same criteria stated in the instructional objective are used in the performance test (exam).	78.38%	3

and "5" being a maximum rating of implementation. The ratings of the individual respondents were tabulated to provide for a statewide mean. None of the fifty-two required characteristics had been implemented on a statewide basis with a mean rating of "5." Four of the required characteristics had been implemented on a statewide basis at a mean rating of "4."

Twenty-two of the required characteristics were perceived to have been implemented by the deans/directors statewide at a rating of "3." Twenty-six of the required characteristics of a competency-based instruction system were perceived to have been implemented statewide at a degree of "2."

A review of Table 1 reveals that all of the responding institutions had implemented the required characteristic "The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace." Table 1 further reveals that this characteristic had a mean implementation of eighty percent based on the perception of the responding deans/directors of occupational education programs.

Barriers to Implementation

Three types of barriers to the implementation of a competency-based instructional system were included on the questionnaire. Items on the questionnaire that were related to organization were coded with a "0." Items considered as interpersonal barriers were coded with an "I." Material barriers items were coded with an "M."

Table 2 provides the tabulation of the responding deans/directors to the questions on barriers. The greatest barrier to the implementation of a competency-based

TABLE 2

Barriers to the Implementation of Competency-Based Instruction Across All Program Areas as Perceived by Deans/Directors of Postsecondary Occupational Education Programs.

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	72.97%	2.70%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	64.86%	8.11%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	54.05%	8.11%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	70.27%	8.11%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	43.24%	8.11%
0- 6	Students may require greater time to master competencies in a CBI system.	48.65%	24.32%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	62.16%	21.62%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	62.16%	8.11%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	51.35%	35.14%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	64.86%	16.22%

TABLE 2

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	67.57%	18.92%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	59.46%	2.70%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	48.65%	13.51%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	48.65%	16.22%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	70.27%	8.11%
I- 2	Many inservice, workshops, and conferences are not competency-based.	62.16%	16.22%
I- 3	State approved teacher education programs are not competency-based.	59.46%	35.14%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	59.46%	21.62%
I- 5	Faculty have insufficient knowledge of CBI.	67.57%	8.11%
I- 6	Faculty believe CBI will make new demands on their time.	86.49%	5.41%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	56.76%	18.92%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	16.22%	18.92%

TABLE 2

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development,but lack skill.	62.16%	5.41%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	67.57%	27.03%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	8.11%	29.73%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	54.05%	16.22%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	59.46%	10.81%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	78.38%	16.22%
M- 4	Facilities are not appropriate for CBI.	35.14%	10.81%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	72.97%	8.11%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	59.46%	10.81%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	75.68%	16.22%

instruction system (CBI) as perceived by eighty-six percent of the responding deans/directors was the interpersonal barrier "1-6 Faculty believe that CBI will make new demands on their time."

The greatest organizational barrier to CBI implementation reported by the deans/directors (73%) was "0-1 Faculty are not provided release time needed to develop a CBI system format."

The greatest material barrier shown on Table 2 was "M-3 There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system."

All Respondents Across All Program Areas

Percent of Implementation

Table 3 shows a comparison of the perception by type of respondents for the implementation of the required characteristics of a competency-based instruction system across all program areas. A review of table 3 reveals there is close agreement of implementation by the three categories of respondents for most of the required characteristics of a competency-based instruction system.

Table 4 presents the number of responding institutions implementing CBI and degree of implementation by vocational program area. The four program areas that had the greatest degree of implementation (80%) as reported by the responding institutions were: Personal and Miscellaneous Services, Construction Trades, Transportation and Material Moving Workers, and Health Professions and Related Sciences.

Barriers to CBI Implementation

The barriers to implementing a competency-based instruction system are presented in Table 5. Table 5 presents a comparison of the perception to the barriers made by the Deans/Directors, Program Chairs, and Instructors. A review of Table 5 reveals that, overall, a greater number of Deans/Directors agreed that the statements were barriers than did the Chairs and Instructors. For example, a greater number of Deans/Directors perceived the statement "0-12 Local administrators do not provide sufficient resources needed to encourage faculty participation in CBI" than did Chairs or Instructors. The barriers to the implementation have been ranked in descending order on Table 6 based on the combined perceptions of all of the respondents. Table 6 reveals that the greatest barrier perceived by the respondents was the interpersonal barrier "Faculty believe CBI will make new demands on their time." The interpersonal barrier "I-5 Faculty have insufficient knowledge of CBI" was in the upper quarter of the ranked barriers.

Responses for Individual Program Areas

The responses of instructors and program chairs/directors/leaders are presented in Volume II of this report.

TABLE 3

Comparison of Responses Across All Program Areas By Type of Respondents For Implementation of CBI Required Characteristics

	Characteristics	Percent of Implementation Across All Program Areas		
		Deans/ Directors	Program Chairs	Instructors
1	Occupational competencies are obtained from the workplace.	97	92	91
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	70	80	78
3	The occupational competencies are sequenced for instructional purposes.	94	93	89
4	The occupational competencies are clustered for course development.	89	89	87
5	Occupational program courses are named and described.	100	98	96
6	The prerequisite courses are identified and listed.	97	95	92
7	The support courses are identified and listed.	97	90	86
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	97	94	90
9	Legitimate or validated career ladder exit points are identified in the curriculum.	86	61	56

TABLE 3

	Percent of Implementation Across All Program Areas		
Characteristics	Deans/ Directors	Program Chairs	Instructors
10 The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	100	98	94
11 Occupational competency profiles are developed for the occupational curriculum (program).	73	67	65
12 Objectives are written in performance terms for each occupational competency.	97	89	86
13 Objectives are written in performance terms for each occupational task.	81	82	81
14 Enabling objectives are written for each task performance objective.	57	68	64
15 Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	97	95	89
16 Learning activities are designed to support the students' ability to learn and perform each competency successfully.	95	97	94
17 All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	78	77	76

TABLE 3

Characteristics	Percent of Implementation Across All Program Areas		
	Deans/ Directors	Program Chairs	Instructors
18 Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	78	59	56
19 Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	89	80	83
20 The student is informed of the required competencies and/or tasks prior to instruction.	95	92	91
21 Learning time is flexible.	62	61	65
22 Learning is guided by feedback.	95	96	93
23 Students are informed of performance measures in advance of instruction for each task.	83	84	85
24 Students are informed of performance measures in advance of instruction for each competency.	89	85	85
25 Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	73	64	67
26 Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	57	56	58

TABLE 3

Characteristics	Percent of Implementation Across All Program Areas		
	Deans/ Directors	Program Chairs	Instructors
27 Students are required to perform each task in a joblike setting.	65	68	68
28 A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	81	73	74
29 The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	92	91	93
30 The instructor is a manager and facilitator of learning.	97	96	98
31 The delivery of instruction is appropriate for the different learning styles of students.	92	91	93
32 A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	70	72	73
33 The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	57	62	61
34 Task and competency progress records are maintained for each student.	57	68	65
35 Student progress records are current.	78	81	78

TABLE 3

	Percent of Implementation Across All Program Areas		
Characteristics	Deans/ Directors	Program Chairs	Instructors
36 Student progress is determined by criterion-referenced measurement.	70	73	72
37 Competency Profiles are kept current for each student.	41	50	48
38 The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	78	70	70
39 A copy of the students' competency profile is included in the students' permanent records.	16	29	34
40 Students exiting a program are provided with a copy of their competency profile.	13	16	17
41 Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	46	43	44
42 Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	65	82	79
43 Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	32	42	44

TABLE 3

Characteristics	Percent of Implementation Across All Program Areas		
	Deans/ Directors	Program Chairs	Instructors
44 The grading system provides for achievement (proficiency) above the established performance (minimum) level.	73	78	80
45 Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	70	70	70
46 The competency exams are totally performance measured.	38	47	56
47 Student mastery of occupational competencies are determined (assessed) on an individual basis.	76	87	81
48 Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	41	40	39
49 Criteria for passing performance tests are acceptable for on-the-job performance.	78	77	74
50 The time taken to complete performance tests is acceptable for the occupation (workplace).	76	74	73
51 In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	59	52	47

TABLE 3

	Percent of Implementation Across All Program Areas		
Characteristics	Deans/ Directors	Program Chairs	Instructors
52 The same criteria stated in the instructional objective are used in the performance test (exam).	78	87	83

TABLE 4

Implementation Of CBI By Program Area

Program Area Title:	N=40 Number of Institutions Implementing CBI	Degree of Implementation As Perceived by Instructors
Agricultural Business and Production	19	60%
Agricultural Sciences	1	40%
Conservation and Renewable Natural Resources	3	60%
Architecture and Related Programs	1	60%
Marketing Operations/Marketing and Distribution	22	60%
Communications	8	60%
Communications Technologies	6	40%
Computer and Information Sciences	40	60%
Personal and Miscellaneous Services	17	80%
Education	3	60%
Engineering-Related Technologies	40	60%
Home Economics	1	20%
Vocational Home Economics	20	60%
Technology Education/Industrial Arts	1	60%
Law and Legal Studies	11	20%
English Language and Literature/Letters	1	20%
Parks, Recreation, Leisure and Fitness Studies	4	20%
Science Technologies	1	60%

TABLE 4

Program Area Title:	N=40 Number of Institutions Implementing CBI	Degree of Implementation as Perceived by Instructors
Protective Services	34	60%
Public Administration and Services	3	60%
Construction Trades	15	80%
Mechanics and Repairers	40	60%
Precision Production Trades	40	60%
Transportation and Materials Moving Workers	5	80%
Visual and Performing Arts	18	60%
Health Professions and Related Sciences	40	80%
Business Management and Administrative Services	40	60%

TABLE 5

Comparison of Responses Across All Program Areas Of Barriers To The Implementation Of CBI By Type Of Respondent

	Percent of Respondents Identifying Barriers to CBI		
Barriers:	Deans/ Directors	Program Chairs	Instructors
Organizational			
0- 1 Faculty are not provided release time needed to develop CBI system format.	73	60	57
0- 2 These institutions do not have specialists trained in CBI systems to assist faculty.	65	49	39
0- 3 Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	54	52	47
0- 4 Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	70	60	46
0- 5 It is difficult to schedule students and facilities needed when using a CBI system.	43	47	41
0- 6 Students may require greater time to master competencies in a CBI system.	49	55	51
0- 7 CBI programs with open entry/open exit do not match institutional methods for determining funding.	62	49	39

TABLE 5

	Percent of Respondents Identifying Barriers to CBI		
Barriers:	Deans/ Directors	Program Chairs	Instructors
0- 8 Faculty have little access to clerical help needed for CBI development,implementation, and maintenance.	62	69	61
0- 9 The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	51	35	29
0-10 Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	65	45	35
0-11 There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	68	48	43
0-12 Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	59	47	42
0-13 Faculty are not aware of opportunities to learn the skills needed to implement CBI.	49	44	43
0-14 CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	49	47	49

TABLE 5

Percent of Respondents Identifying Barriers to CBI

Barriers:		Deans/ Directors	Program Chairs	Instructors
	Interpersonal Barriers			
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	70	53	40
I- 2	Many inservice, workshops, and conferences are not competency-based.	62	55	49
I- 3	State approved teacher education programs are not competency-based.	59	36	31
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	59	55	43
I- 5	Faculty have insufficient knowledge of CBI.	68	59	54
I- 6	Faculty believe CBI will make new demands on their time.	86	73	64
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	57	49	36
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	16	21	18

TABLE 5

Barriers:	Deans/ Directors	Program/ Chairs	Instructors
	Percent of Respondents Identifying Barriers to CBI		
I- 9 Faculty have responsibility for CBI program development, but lack skills.	62	54	45
I-10 Teacher education programs do not adequately prepare faculty to use a CBI system.	68	50	48
I-11 Faculty fears that the CBI system may result in the loss of his/her position.	8	10	10
Material Barriers			
M- 1 Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	54	49	46
M- 2 Institutions have difficulty in keeping CBI instructional materials current.	59	49	41
M- 3 There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	78	53	41
M- 4 Facilities are not appropriate for CBI.	35	28	29
M- 5 Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	73	66	63

TABLE 5

Barriers:	Percent of Respondents Identifying Barriers to CBI Deans/ Directors	 Program/ Chairs	 Instructors
M- 6 CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	59	41	35
M- 7 State funding for educational instruction is not sufficient for CBI programs.	76	56	49

TABLE 6

Rank of Barriers To CBI As
Perceived By All Respondents

Barriers:		Mean Percent
I- 6	Faculty believe CBI will make new demands on their time.	74
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	67
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	64
0- 1	Faculty are not provided release time needed to develop CBI system format.	63
I- 5	Faculty have insufficient knowledge of CBI.	60
M- 7	State funding for educational instruction is not sufficient for CBI programs.	60
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	59
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	57
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	55
I- 2	Many inservice, workshops, and conferences are not competency-based.	55
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	54
I- 9	Faculty have responsibility for CBI program development,but lack skill.	54

TABLE 6

Barriers:		Mean Percent
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	53
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	52
0- 6	Students may require greater time to master competencies in a CBI system	52
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	51
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	51
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	50
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	50
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	50
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	49
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	48
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	48
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	47

TABLE 6

Barriers:		Mean Percent
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	44
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	45
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	45
I- 3	State approved teacher education programs are not competency-based.	42
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	38
M- 4	Facilities are not appropriate for CBI.	31
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	18
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	9

IV. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary of Findings

The goal of this project was to design and pilot a statewide assessment process or model that could be used to determine the extent of the use of competency-based instruction by all technical/vocational programs and courses in a Texas public community and technical colleges. A copy of the model is presented in Appendix D. The data presented in Chapter III of this report was the result of the pilot of the statewide assessment model.

By a review of the presentation of the data offered by the pilot, it was found that there was some degree of implementation of a competency-based instruction system by all of the program areas of the responding institutions. Only four of the program areas had an implementation rate of eighty-percent. Seventeen of the programs had an implementation rate of sixty-percent and two of the program areas had an implementation rate of forty percent.

Seven of the eleven interpersonal barriers were identified by more than fifty-percent of the respondents as barriers to the implementation of a competency-based instructional system.

Although more than ninety percent of the responding institutions were developing the curriculum using occupational competencies from the workplace, less than forty percent were using occupational competency exams to determine a student's achievement of the competencies.

Conclusions

A number of conclusions may be made from an analysis the background information in Chapter I and data presented in Chapter III. The following are conclusions drawn from this study that are immediately significant to the needs of the Texas Higher Education Coordinating Board who sponsored the project:

1. The assessment model is appropriate for use by The Community and Technical College Division of the Texas Higher Education Coordinating Board to obtain information needed in determining priorities for state programs and state leadership activities;
2. Great progress has been made during the last three years, but the degree of implementation of competency-based instruction for occupational preparation programs desired and mandated by the Coördinating Board is only sixty percent;
3. An understanding of a competency-based instruction and the ability to implement a total competency-based instruction system by administrators and faculty is the greatest barrier to the implementation and successful maintenance of a competency-based instruction system.
4. Program standards or required characteristics of a competency-based instruction system have not been established and published by the Texas Higher Education Coordinating Board; and
5. The desired degree of the implementation of competency-based instruction will be directly dependent on the knowledge and skills required for the implementation of CBI being developed by administrators and faculty.

Recommendations

The following recommendations for increasing the implementation of a competency-based instruction in postsecondary occupational technical programs are made for consideration by the staff of Texas Higher Education Coordinating Board, members of the Federal Projects Advisory Committee, and members of the Professional Development Committee:

1. Program standards for competency-based instruction be established and used by the Texas Higher Education Coordinating Board in the evaluation of postsecondary occupational/technical programs;

2. This study should be replicated statewide by specific programs over a period of years until all programs have been assessed; and

3. The Texas Higher Education Coordinating Board conduct or contract for professional development activities and/or programs designed to develop the knowledge and skills needed to implement and maintain a competency-based instruction system. The professional development activities and programs should be conducted until every postsecondary administrator and full-time instructor of occupational/technical programs has been professionally prepared to implement and maintain all of the established characteristics of a competency-based instruction system.

APPENDICES

APPENDIX A

Report of Project Advisory Committee Members

Agenda
Project Advisory Committee
"Assessment of Competency-Based Instruction"
August 12, 1992
Texas Higher Education Coordinating Board
Room 5-209
Austin, Texas

10:00 a.m.	Call to order Introductions Overview of project PAC responsibilities
11:45 a.m.	Lunch
1:00 p.m.	Characteristics of Competency-Based Instruction Nominations for Panel of Experts
3:00 p.m.	Adjourn

Minutes of the
Project Advisory Committee
Assessment of Competency-Based Instruction
August 12, 1992

The Project Advisory Committee for the "Assessment of Competency-Based Instruction" project was convened for its first meeting in room 5.209 of the Texas Higher Education Coordinating Board in Austin, Texas on August 12, 1992. All of the members but one listed on the attached "Project Advisory Committee" page were present. June Nutt, Coordinator for Vocational Education at Panola College represented Dr. Ron Johnston. The meeting was called to order by Dr. Bill E. Lovelace, project director from the University of North Texas. Introductions were made for each member. Dr. Bob Lahti of the Texas Higher Education Coordinating Board was introduced and will serve as Staff Advisor to the project for the Coordinating Board.

Dr. Lovelace provided an overview of the project and the responsibilities of the Project Advisory Committee (PAC). The PAC members discussed the project procedures and objectives.

The PAC members reviewed a proposed list of examples of characteristics of a competency-based instructional system. The PAC members made revisions to the characteristics on the list of examples. Additional characteristics were not recommended during the meeting. Each PAC member was invited to submit additional characteristics to the project director after returning to their respective institutions.

The PAC membership discussed the proposed format of the questionnaire to be used in obtaining responses from staff and faculty of public two-year postsecondary institutions. The PAC membership did not make any recommendations for changing the proposed format of the questionnaire.

The role and responsibilities of the Panel of Experts for the Delphi to be used in establishing the characteristics of a competency-based instructional system for the project was discussed. The PAC membership expressed a willingness to serve on the panel for the Delphi. Nominations for individuals external to the PAC membership to serve as a member of the Panel of Experts were not made. PAC members were requested to submit nominations for the Panel of Experts to the project director at their convenience. The PAC agreed that it would be appropriate to have another meeting during the latter part of January 1993.

The meeting was adjourned at 3:00 p.m.

Agenda

Project Advisory Committee Meeting
Assessment of Competency-Based Instruction

January 25, 1993
Austin, Texas

10:00 a.m. — Project Progress Report

10:15 a.m. — Review of:

1. Draft of Statewide Assessment Model
2. Draft of Local Evaluation Model
3. Plan to Implement State Model
4. Survey Forms

11:45 a.m. — Lunch

1:00 p.m. — Continue Reviews

3:00 p.m. — Adjourn

ASSESSMENT OF COMPETENCY-BASED INSTRUCTION

REPORT OF THE
PROJECT ADVISORY COMMITTEE MEETING
January 25, 1993

The Project Advisory Committee for the Assessment of Competency-Based Instruction was convened in Austin, Texas on January 25, 1993 at 10:00 a.m. The purpose at the meeting was to review and make recommendations for approval of the following project products:

1. Draft of Statewide Assessment Model;
2. Draft of Local Evaluation Model;
3. Plan to implement the Statewide Assessment Model; and
4. Survey forms

The Project Advisory Committee members reviewed all of the project products presented and made recommendations for changes of each product reviewed. The committee agreed to approve the products with the recommended changes.

The meeting was adjourned at 3:00 p.m., January 25, 1993.

Attachment 1

APPENDIX B

Final Round of Delphi

Appendix B

THE ASSESSMENT OF THE IMPLEMENTATION OF COMPETENCY-BASED INSTRUCTION
Final Round

Delphi Identification of the required characteristics of a competency-based instructional program.

	Characteristics Round 3	Round 3 Mean
1	Occupational competencies are obtained from the workplace.	6.8
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	5.6
3	The occupational competencies are sequenced for instructional purposes.	6.9
4	The occupational competencies are clustered for course development.	6.8
5	Occupational program courses are named and described.	6.9
6	The prerequisite courses are identified and listed.	6.9
7	The support courses are identified and listed.	6.4
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	6.0
9	Legitimate or validated career ladder exit points are identified in the curriculum.	5.8
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	6.1
11	Occupational competency profiles are developed for the occupational curriculum (program).	5.9
12	Objectives are written in performance terms for each occupational competency.	6.6
13	Objectives are written in performance terms for each occupational task.	6.0
14	Enabling objectives are written for each task performance objective.	5.5
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	6.7
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	5.7
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	6.3
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	6.0
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	6.9
20	The student is informed of the required competencies and/or tasks prior to instruction.	5.9
21	Learning time is flexible.	4.7
22	Learning is guided by feedback.	5.5
23	Students are informed of performance measures in advance of instruction for each task.	5.8
24	Students are informed of performance measures in advance of instruction for each competency.	5.9
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	5.7

Characteristics Round 3		Round 3 Mean
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	5.5
27	Students are required to perform each task in a joblike setting.	4.9
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	5.3
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	5.3
30	The instructor is a manager and facilitator of learning.	6.6
31	The delivery of instruction is appropriate for the different learning styles of students.	4.9
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	6.0
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	5.9
34	Task and competency progress records are maintained for each student.	6.4
35	Student progress records are current.	6.5
36	Student progress is determined by criterion-referenced measurement.	7.0
37	Competency Profiles are kept current for each student.	5.9
38	The minimum acceptable measure of occupational competency or task achievement is based on the performance level established by the workplace.	6.1
39	A copy of the students' competency profile is included in the students' permanent records.	5.9
40	Students exiting a program are provided with a copy of their competency profile.	5.9
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	4.0
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	5.8
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	5.5
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	5.7
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	5.9
46	The competency exams are totally performance measured.	6.4
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	6.1
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	5.0
49	Criteria for passing performance tests are acceptable for on-the-job performance.	5.6
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	6.1

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	Characteristics Round 3	Round 3 Mean
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	6.0
52	The same criteria stated in the instructional objective are used in the performance test (exam).	6.4

APPENDIX C

Example of Assessment Questionnaires

March 10, 1993

title~ first name~ last name~
position?~
institution~
address~
city, state, zip~

Dear title~ last name~:

The University of North Texas has contracted with the Texas Higher Education Coordinating Board to determine the extent to which competency-based instruction is being used by public postsecondary institutions to conduct technical/vocational programs.

We have proposed to determine the use of competency-based instruction by surveying: (1) the Deans/Directors of occupational education; (2) Division/Program Chairs/Heads of each program and; (3) one instructor of each program. This assessment is being made to determine the use of competency-based instruction on a statewide basis. Therefore, the results of the assessment will not be compiled and reported by individual institution unless requested by the respective Dean/Director of the institution.

Will you assist us in conducting the assessment by distributing **to** and collecting **from** your faculty the enclosed questionnaires? An addressed postage paid envelope is enclosed for your use in returning the completed questionnaires. Please return the completed questionnaires on or before .

If we have not included questionnaires for all of your programs, please let me know which programs we overlooked. Please call us at (817) 565-4109 if you have any questions about the assessment.

Sincerely,

Bill E. Lovelace, Director
Assessment of Competency-Based Instruction

BEL:pp
Enclosures

Rationale for the Assessment of Competency-Based Instruction

The Texas Higher Education Coordinating Board supports the use of competency-based instruction to achieve accountability. The use of a competency-based instruction system to deliver a competency-based curriculum is supported by mandate and implied mandate. The Technical and Vocational Program Guidelines (1989) disseminated by the Texas Higher Education Coordinating Board provides the following definition of competency-based instruction (competency-based education);

> Competency-based education is designed to teach job related clusters of skills and knowledge, the mastery of which forms the basis upon which the student is evaluated; competency-based programs must possess the following characteristics.
>
> 1. Involvement of business and industry in the determination of the job competencies and the expected performance level required for successful employment within a defined job or cluster of jobs.
> 2. Course sequence which allows the mastery of competencies leading to the satisfactory performance of all identified competencies.

The Texas Higher Education Coordinating Board has contracted with the University of North Texas to conduct a statewide assessment to determine the extent to which competency-based instruction has been implemented in vocational/technical education programs in all Texas public community and technical colleges.

Implementation Assessment Questionnaire of Competency-Based Instruction Characteristics

Deans/Directors Questionnaire
Part 1

Instructions:

This part of the questionnaire is being used to determine the extent to which characteristics of a competency-based instructional system are being implemented on your campus for technical/vocational programs.

1. For each characteristic of competency-based instruction on this part of the questionnaire indicate the extent the characteristic has been implemented for technical/vocational programs on your campus. Circle Ⓨ for "Yes" or circle Ⓝ for "No." If you circle "N" do not rate the characteristic, go to the next characteristic and repeat 1.

2. If you circled a "Y" for the characteristic then:

   Rate the degree to which you feel that the characteristic has been implemented on your campus. Placing a circle around the ① will indicate that the level of implementation of the characteristic is **minimal**. Placing a circle around the ⑤ will indicate that level of implementation of the characteristic is **maximum**.

   Go to next characteristic.

Implementation Assessment Questionnaire of Competency-Based Instruction Characteristics

Deans/Directors Questionnaire
Questionnaire

Characteristics:	Has This Characteristic Been Implemented on Your Campus?	Degree of Implementation: Minimum-Maximum
Examples:		
1. ▨	Y [✓ N]	1 2 3 4 5
2. ▨	[✓ Y] N	1 [✓ 2] 3 4 5
1 Occupational competencies are obtained from the workplace.	Y N	1 2 3 4 5
2 Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	Y N	1 2 3 4 5
3 The occupational competencies are sequenced for instructional purposes.	Y N	1 2 3 4 5
4 The occupational competencies are clustered for course development.	Y N	1 2 3 4 5
5 Occupational program courses are named and described.	Y N	1 2 3 4 5
6 The prerequisite courses are identified and listed.	Y N	1 2 3 4 5
7 The support courses are identified and listed.	Y N	1 2 3 4 5
8 Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	Y N	1 2 3 4 5

Characteristics:	Has This Characteristic Been Implemented on Your Campus?	Degree of Implementation: Minimum-Maximum
9 Legitimate or validated career ladder exit points are identified in the curriculum.	Y N	1 2 3 4 5
10 The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	Y N	1 2 3 4 5
11 Occupational competency profiles are developed for the occupational curriculum (program).	Y N	1 2 3 4 5
12 Objectives are written in performance terms for each occupational competency.	Y N	1 2 3 4 5
13 Objectives are written in performance terms for each occupational task.	Y N	1 2 3 4 5
14 Enabling objectives are written for each task performance objective.	Y N	1 2 3 4 5
15 Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	Y N	1 2 3 4 5
16 Learning activities are designed to support the students' ability to learn and perform each competency successfully.	Y N	1 2 3 4 5
17 All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	Y N	1 2 3 4 5
18 Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	Y N	1 2 3 4 5
19 Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	Y N	1 2 3 4 5

Characteristics:	Has This Characteristic Been Implemented on Your Campus?	Degree of Implementation: Minimum-Maximum
20 The student is informed of the required competencies and/or tasks prior to instruction.	Y N	1 2 3 4 5
21 Learning time is flexible.	Y N	1 2 3 4 5
22 Learning is guided by feedback.	Y N	1 2 3 4 5
23 Students are informed of performance measures in advance of instruction for each task.	Y N	1 2 3 4 5
24 Students are informed of performance measures in advance of instruction for each competency.	Y N	1 2 3 4 5
25 Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	Y N	1 2 3 4 5
26 Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	Y N	1 2 3 4 5
27 Students are required to perform each task in a joblike setting.	Y N	1 2 3 4 5
28 A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	Y N	1 2 3 4 5
29 The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	Y N	1 2 3 4 5
30 The instructor is a manager and facilitator of learning.	Y N	1 2 3 4 5
31 The delivery of instruction is appropriate for the different learning styles of students.	Y N	1 2 3 4 5

Characteristics:	Has This Characteristic Been Implemented on Your Campus?	Degree of Implementation: Minimum-Maximum
32 A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	Y N	1 2 3 4 5
33 The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	Y N	1 2 3 4 5
34 Task and competency progress records are maintained for each student.	Y N	1 2 3 4 5
35 Student progress records are current.	Y N	1 2 3 4 5
36 Student progress is determined by criterion-referenced measurement.	Y N	1 2 3 4 5
37 Competency Profiles are kept current for each student.	Y N	1 2 3 4 5
38 The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	Y N	1 2 3 4 5
39 A copy of the students' competency profile is included in the students' permanent records.	Y N	1 2 3 4 5
40 Students exiting a program are provided with a copy of their competency profile.	Y N	1 2 3 4 5
41 Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	Y N	1 2 3 4 5
42 Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	Y N	1 2 3 4 5

Characteristics:	Has This Characteristic Been Implemented on Your Campus?	Degree of Implementation: Minimum-Maximum
43 Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	Y N	1 2 3 4 5
44 The grading system provides for achievement (proficiency) above the established performance (minimum) level.	Y N	1 2 3 4 5
45 Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	Y N	1 2 3 4 5
46 The competency exams are totally performance measured.	Y N	1 2 3 4 5
47 Student mastery of occupational competencies are determined (assessed) on an individual basis.	Y N	1 2 3 4 5
48 Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	Y N	1 2 3 4 5
49 Criteria for passing performance tests are acceptable for on-the-job performance.	Y N	1 2 3 4 5
50 The time taken to complete performance tests is acceptable for the occupation (workplace).	Y N	1 2 3 4 5
51 In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	Y N	1 2 3 4 5
52 The same criteria stated in the instructional objective are used in the performance test (exam).	Y N	1 2 3 4 5

BARRIERS TO IMPLEMENTING AND/OR MAINTAINING COMPETENCY-BASED INSTRUCTION

Below is a list of statements that have been considered as barriers to the implementation of Competency-Based Instruction. (CBI)

Please review each statement. If this statement has been a barrier to the implementation and/or maintenance of CBI for your program at your institution, please place a check under "yes." If this statement has not been a barrier to the inplementation and/or maintenance of CBI for your program at your institution, please place a check under "no." If you are not sure if the statement has been a barrier to the implementation and/or maintenance of CBI for your program, please place a check under "don't know."

Statements

	Organizational Barriers	a barrier? yes	no	don't know
0- 1	Faculty are not provided release time needed to develop CBI system format.	___	___	___
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	___	___	___
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	___	___	___
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	___	___	___
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	___	___	___
0- 6	Students may require greater time to master competencies in a CBI system.	___	___	___

	Barriers To Implementing And/Or Maintaining Competency-Based Instruction	a barrier?		
		yes	no	don't know
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	___	___	___
0- 8	Faculty have little access to clerical help needed for CBI development,implementation, and maintenance.	___	___	___
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	___	___	___
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	___	___	___
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	___	___	___
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	___	___	___
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	___	___	___
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	___	___	___
	Interpersonal Barriers			
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	___	___	___
I- 2	Many inservice, workshops, and conferences are not competency-based.	___	___	___
I- 3	State approved teacher education programs are not competency-based.	___	___	___
		___	___	___

	Barriers To Implementing And/Or Maintaining Competency-Based Instruction	a barrier?		
		yes	no	don't know
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	___	___	___
I- 5	Faculty have insufficient knowledge of CBI.	___	___	___
I- 6	Faculty believe CBI will make new demands on their time.	___	___	___
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	___	___	___
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	___	___	___
I- 9	Faculty have responsibility for CBI program development, but lack skills.	___	___	___
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	___	___	___
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	___	___	___
	Material Barriers			
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	___	___	___
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	___	___	___
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	___	___	___
M- 4	Facilities are not appropriate for CBI.	___	___	___

	Barriers To Implementing And/Or Maintaining Competency-Based Instruction	a barrier?		
		yes	no	don't know
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	___	___	___
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	___	___	___
M- 7	State funding for educational instruction is not sufficient for CBI programs.	___	___	___

March 5, 1993

Dear Division/Program Chair/Director/Instructional Leader:

The University of North Texas has contracted with the Texas Higher Education Coordinating Board to determine the extent to which competency-based instruction is being used by programs by public postsecondary institutions to conduct technical/vocational instruction. The assessment is being done on a statewide basis. Therefore, the results of the assessment will not be reported for each institution.

Please assist us in conducting the assessment by completing the enclosed questionnaire, placing it the enclosed envelope, and returning it to your Dean or Director for occupational education. Your technical Dean/Director has a Glossary of Terms related to competency-based instruction.

If you have any questions about the assessment, call me at (817) 565-4109.

Sincerely,

Bill E. Lovelace, Director
Assessment of Compentency-Based Instruction

BEL:pp
Enclosures

Rationale for the Assessment of Competency-Based Instruction

The Texas Higher Education Coordinating Board supports the use of competency-based instruction to achieve accountability. The use of a competency-based instruction system to deliver a competency-based curriculum is supported by mandate and implied mandate. The Technical and Vocational Program Guidelines (1989) disseminated by the Texas Higher Education Coordinating Board provides the following definition of competency-based instruction (competency-based education);

> Competency-based education is designed to teach job related clusters of skills and knowledge, the mastery of which forms the basis upon which the student is evaluated; competency-based programs must possess the following characteristics.
>
> 1. Involvement of business and industry in the determination of the job competencies and the expected performance level required for successful employment within a defined job or cluster of jobs.
> 2. Course sequence which allows the mastery of competencies leading to the satisfactory performance of all identified competencies.

The Texas Higher Education Coordinating Board has contracted with the University of North Texas to conduct a statewide assessment to determine the extent to which competency-based instruction has been implemented in vocational/technical education programs in all Texas public community and technical colleges.

Program Area: area~
CIP Division : division~

Implementation Assessment Questionnaire of Competency-Based Instruction Characteristics

Division/Program Chair/Director
Part 1

Instructions:

This part of the questionnaire is being used to determine the extent to which characteristics of a competency-based instructional system are being implemented on your campus for the (name of program area) program area.

1. For each characteristic of competency-based instruction on this part of the questionnaire indicate the extent the characteristic has been implemented for technical/vocational programs on your campus. Circle Ⓨ for "Yes" or circle Ⓝ for "No." If you circle "N" do not rate the characteristic, go to the next characteristic and repeat 1.

2. If you circled a "Y" for the characteristic then:

   Rate the degree to which you feel that the characteristic has been implemented on your campus. Placing a circle around the ① will indicate that the level of implementation of the characteristic is **minimal**. Placing a circle around the ⑤ will indicate that level of implementation of the characteristic is **maximum**.

   Go to next characteristic.

Program Area: (to be typed in)
CIP Division : (to be typed in)

Implementation Assessment Questionnaire of Competency-Based Instruction Characteristics

Division/Program Chair/Director
Questionnaire

Characteristics:	Has This Characteristic Been Implemented on Your Campus?	Degree of Implementation: Minimum-Maximum
Examples:		
1.	Y [✓ N]	1 2 3 4 5
2.	[✓ Y] N	1 [✓ 2] 3 4 5
1 Occupational competencies are obtained from the workplace.	Y N	1 2 3 4 5
2 Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	Y N	1 2 3 4 5
3 The occupational competencies are sequenced for instructional purposes.	Y N	1 2 3 4 5
4 The occupational competencies are clustered for course development.	Y N	1 2 3 4 5
5 Occupational program courses are named and described.	Y N	1 2 3 4 5
6 The prerequisite courses are identified and listed.	Y N	1 2 3 4 5
7 The support courses are identified and listed.	Y N	1 2 3 4 5
8 Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	Y N	1 2 3 4 5

Characteristics:	Has This Characteristic Been Implemented on Your Campus?	Degree of Implementation: Minimum-Maximum
9 Legitimate or validated career ladder exit points are identified in the curriculum.	Y N	1 2 3 4 5
10 The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	Y N	1 2 3 4 5
11 Occupational competency profiles are developed for the occupational curriculum (program).	Y N	1 2 3 4 5
12 Objectives are written in performance terms for each occupational competency.	Y N	1 2 3 4 5
13 Objectives are written in performance terms for each occupational task.	Y N	1 2 3 4 5
14 Enabling objectives are written for each task performance objective.	Y N	1 2 3 4 5
15 Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	Y N	1 2 3 4 5
16 Learning activities are designed to support the students' ability to learn and perform each competency successfully.	Y N	1 2 3 4 5
17 All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	Y N	1 2 3 4 5
18 Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	Y N	1 2 3 4 5
19 Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	Y N	1 2 3 4 5

Characteristics:	Has This Characteristic Been Implemented on Your Campus?	Degree of Implementation: Minimum-Maximum
20 The student is informed of the required competencies and/or tasks prior to instruction.	Y N	1 2 3 4 5
21 Learning time is flexible.	Y N	1 2 3 4 5
22 Learning is guided by feedback.	Y N	1 2 3 4 5
23 Students are informed of performance measures in advance of instruction for each task.	Y N	1 2 3 4 5
24 Students are informed of performance measures in advance of instruction for each competency.	Y N	1 2 3 4 5
25 Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	Y N	1 2 3 4 5
26 Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	Y N	1 2 3 4 5
27 Students are required to perform each task in a joblike setting.	Y N	1 2 3 4 5
28 A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	Y N	1 2 3 4 5
29 The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	Y N	1 2 3 4 5
30 The instructor is a manager and facilitator of learning.	Y N	1 2 3 4 5
31 The delivery of instruction is appropriate for the different learning styles of students.	Y N	1 2 3 4 5

Characteristics:	Has This Characteristic Been Implemented on Your Campus?	Degree of Implementation: Minimum-Maximum
32 A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	Y N	1 2 3 4 5
33 The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	Y N	1 2 3 4 5
34 Task and competency progress records are maintained for each student.	Y N	1 2 3 4 5
35 Student progress records are current.	Y N	1 2 3 4 5
36 Student progress is determined by criterion-referenced measurement.	Y N	1 2 3 4 5
37 Competency Profiles are kept current for each student.	Y N	1 2 3 4
38 The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	Y N	1 2 3 4
39 A copy of the students' competency profile is included in the students' permanent records.	Y N	1 2 3 4
40 Students exiting a program are provided with a copy of their competency profile.	Y N	1 2 3 4
41 Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	Y N	1 2 3 4
42 Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	Y N	1 2 3 4

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Characteristics:	Has This Characteristic Been Implemented on Your Campus?	Degree of Implementation: Minimum-Maximum
43 Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	Y N	1 2 3 4 5
44 The grading system provides for achievement (proficiency) above the established performance (minimum) level.	Y N	1 2 3 4 5
45 Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	Y N	1 2 3 4 5
46 The competency exams are totally performance measured.	Y N	1 2 3 4 5
47 Student mastery of occupational competencies are determined (assessed) on an individual basis.	Y N	1 2 3 4 5
48 Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	Y N	1 2 3 4
49 Criteria for passing performance tests are acceptable for on-the-job performance.	Y N	1 2 3 4
50 The time taken to complete performance tests is acceptable for the occupation (workplace).	Y N	1 2 3 4
51 In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	Y N	1 2 3 4
52 The same criteria stated in the instructional objective are used in the performance test (exam).	Y N	1 2 3 4

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CBI Assessment Part II
Program Area: (to be typed in)
CIP Division : (to be typed in)

Division/Program

Chairs/Directors

BARRIERS TO IMPLEMENTING AND/OR MAINTAINING COMPETENCY-BASED INSTRUCTION

Below is a list of statements that have been considered as barriers to the implementation of Competency-Based Instruction. (CBI)

Please review each statement. If this statement has been a barrier to the implementation and/or maintenance of CBI for your program at your institution, please place a check under "yes." If this statement has not been a barrier to the inplementation and/or maintenance of CBI for your program at your institution, please place a check under "no." If you are not sure if the statement has been a barrier to the implementation and/or maintenance of CBI for your program, please place a check under "don't know."

Statements

	Organizational Barriers	a barrier? yes	no	don't know
0- 1	Faculty are not provided release time needed to develop CBI system format.	___	___	___
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	___	___	___
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	___	___	___
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	___	___	___
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	___	___	___
0- 6	Students may require greater time to master competencies in a CBI system.	___	___	___

Barriers To Implementing And/Or Maintaining Competency-Based Instruction

		a barrier?		
		yes	no	don't know
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	___	___	___
0- 8	Faculty have little access to clerical help needed for CBI development,implementation, and maintenance.	___	___	___
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	___	___	___
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	___	___	___
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	___	___	___
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	___	___	___
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	___	___	___
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	___	___	___
	Interpersonal Barriers			
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	___	___	___
I- 2	Many inservice, workshops, and conferences are not competency-based.	___	___	___
I- 3	State approved teacher education programs are not competency-based.	___	___	___

	Barriers To Implementing And/Or Maintaining Competency-Based Instruction	a barrier?		
		yes	no	don't know
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	___	___	___
I- 5	Faculty have insufficient knowledge of CBI.	___	___	___
I- 6	Faculty believe CBI will make new demands on their time.	___	___	___
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	___	___	___
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	___	___	___
I- 9	Faculty have responsibility for CBI program development, but lack skills.	___	___	___
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	___	___	___
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	___	___	___
	Material Barriers			
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	___	___	___
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	___	___	___
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	___	___	___
M- 4	Facilities are not appropriate for CBI.	___	___	___

	Barriers To Implementing And/Or Maintaining Competency-Based Instruction	a barrier? yes	a barrier? no	a barrier? don't know
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	___	___	___
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	___	___	___
M- 7	State funding for educational instruction is not sufficient for CBI programs.	___	___	___

March 5, 1993

Dear Instructor:

The University of North Texas has contracted with the Texas Higher Education Coordinating Board to determine the extent to which competency-based instruction is being used by programs by public postsecondary institutions to conduct technical/vocational instruction. The assessment is being done on a statewide basis. Therefore, the results of the assessment will not be reported for each institution.

Please assist us in conducting the assessment by completing the enclosed questionnaire, placing it the enclosed envelope, and returning it to your Dean or Director for occupational education. Your technical Dean/Director has a Glossary of Terms related to competency-based instruction.

If you have any questions about the assessment, call me at (817) 565-4109.

Sincerely,

Bill E. Lovelace, Director
Assessment of Compentency-Based Instruction

BEL:pp
Enclosures

Rationale for the Assessment of Competency-Based Instruction

The Texas Higher Education Coordinating Board supports the use of competency-based instruction to achieve accountability. The use of a competency-based instruction system to deliver a competency-based curriculum is supported by mandate and implied mandate. The Technical and Vocational Program Guidelines (1989) disseminated by the Texas Higher Education Coordinating Board provides the following definition of competency-based instruction (competency-based education);

> Competency-based education is designed to teach job related clusters of skills and knowledge, the mastery of which forms the basis upon which the student is evaluated; competency-based programs must possess the following characteristics.
>
> 1. Involvement of business and industry in the determination of the job competencies and the expected performance level required for successful employment within a defined job or cluster of jobs.
> 2. Course sequence which allows the mastery of competencies leading to the satisfactory performance of all identified competencies.

The Texas Higher Education Coordinating Board has contracted with the University of North Texas to conduct a statewide assessment to determine the extent to which competency-based instruction has been implemented in vocational/technical education programs in all Texas public community and technical colleges.

Program Area: area~
Division : division~

Name of Program____________ CIP

____
(Please write in name of program
that you teach.)

Implementation Assessment Questionnaire of Competency-Based Instruction Characteristics

Instructors
Part 1

Instructions:

This part of the questionnaire is being used to determine the extent to which characteristics of a competency-based instructional system are being implemented on your campus for the area2~ program area.

1. For each characteristic of competency-based instruction on this part of the questionnaire indicate the extent the characteristic has been implemented for technical/vocational programs on your campus. Circle Ⓨ for "Yes" or circle Ⓝ for "No." If you circle "N" do not rate the characteristic, go to the next characteristic and repeat 1.

2. If you circled a "Y" for the characteristic then:

   Rate the degree to which you feel that the characteristic has been implemented on your campus. Placing a circle around the ① will indicate that the level of implementation of the characteristic is **minimal.** Placing a circle around the ⑤ will indicate that level of implementation of the characteristic is **maximum.**

   Go to next characteristic.

Program Area: (to be typed in)
CIP Division : (to be typed in)

Name of Program____________
____
(Please write in name of program that you teach.)

Implementation Assessment Questionnaire of Competency-Based Instruction Characteristics

Instructors Questionnaire

Characteristics:	Has This Characteristic Been Implemented on Your Campus?	Degree of Implementation: Minimum-Maximum
Examples:		
1.	Y [✓ N]	1 2 3 4 5
2.	[✓ Y] N	1 [✓ 2] 3 4 5
1 Occupational competencies are obtained from the workplace.	Y N	1 2 3 4 5
2 Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	Y N	1 2 3 4 5
3 The occupational competencies are sequenced for instructional purposes.	Y N	1 2 3 4
4 The occupational competencies are clustered for course development.	Y N	1 2 3 4
5 Occupational program courses are named and described.	Y N	1 2 3 4
6 The prerequisite courses are identified and listed.	Y N	1 2 3 4
7 The support courses are identified and listed.	Y N	1 2 3 4
8 Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	Y N	1 2 3 4

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	Characteristics:	Has This Characteristic Been Implemented on Your Campus?	Degree of Implementation: Minimum-Maximum
9	Legitimate or validated career ladder exit points are identified in the curriculum.	Y N	1 2 3 4 5
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	Y N	1 2 3 4 5
11	Occupational competency profiles are developed for the occupational curriculum (program).	Y N	1 2 3 4 5
12	Objectives are written in performance terms for each occupational competency.	Y N	1 2 3 4 5
13	Objectives are written in performance terms for each occupational task.	Y N	1 2 3 4
14	Enabling objectives are written for each task performance objective.	Y N	1 2 3 4
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	Y N	1 2 3 4
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	Y N	1 2 3 4
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	Y N	1 2 3 4
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	Y N	1 2 3 4
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	Y N	1 2 3 4

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Characteristics:	Has This Characteristic Been Implemented on Your Campus?	Degree of Implementation Minimum-Maximu
20 The student is informed of the required competencies and/or tasks prior to instruction.	Y N	1 2 3 4
21 Learning time is flexible.	Y N	1 2 3 4
22 Learning is guided by feedback.	Y N	1 2 3 4
23 Students are informed of performance measures in advance of instruction for each task.	Y N	1 2 3 4
24 Students are informed of performance measures in advance of instruction for each competency.	Y N	1 2 3 4
25 Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	Y N	1 2 3 4
26 Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	Y N	1 2 3 4
27 Students are required to perform each task in a joblike setting.	Y N	1 2 3 4
28 A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	Y N	1 2 3 4
29 The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	Y N	1 2 3 4
30 The instructor is a manager and facilitator of learning.	Y N	1 2 3 4
31 The delivery of instruction is appropriate for the different learning styles of students.	Y N	1 2 3 4

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Characteristics:	Has This Characteristic Been Implemented on Your Campus?	Degree of Implementation: Minimum-Maximum
32 A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	Y N	1 2 3 4 5
33 The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	Y N	1 2 3 4 5
34 Task and competency progress records are maintained for each student.	Y N	1 2 3 4 5
35 Student progress records are current.	Y N	1 2 3 4 5
36 Student progress is determined by criterion-referenced measurement.	Y N	1 2 3 4 5
37 Competency Profiles are kept current for each student.	Y N	1 2 3 4
38 The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	Y N	1 2 3 4
39 A copy of the students' competency profile is included in the students' permanent records.	Y N	1 2 3 4
40 Students exiting a program are provided with a copy of their competency profile.	Y N	1 2 3 4
41 Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	Y N	1 2 3 4
42 Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	Y N	1 2 3 4

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Characteristics:	Has This Characteristic Been Implemented on Your Campus?	Degree of Implementation: Minimum-Maximum
43 Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	Y N	1 2 3 4 5
44 The grading system provides for achievement (proficiency) above the established performance (minimum) level.	Y N	1 2 3 4 5
45 Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	Y N	1 2 3 4 5
46 The competency exams are totally performance measured.	Y N	1 2 3 4 5
47 Student mastery of occupational competencies are determined (assessed) on an individual basis.	Y N	1 2 3 4 5
48 Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	Y N	1 2 3 4 5
49 Criteria for passing performance tests are acceptable for on-the-job performance.	Y N	1 2 3 4 5
50 The time taken to complete performance tests is acceptable for the occupation (workplace).	Y N	1 2 3 4 5
51 In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	Y N	1 2 3 4
52 The same criteria stated in the instructional objective are used in the performance test (exam).	Y N	1 2 3 4

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CBI Assessment Part II
Program Area: (to be typed in)
CIP Division : (to be typed in)

Name of Program ________________
____
(Please write in name of program
that you teach.)

BARRIERS TO IMPLEMENTING AND/OR MAINTAINING COMPETENCY-BASED INSTRUCTION

Below is a list of statements that have been considered as barriers to the implementation of Competency-Based Instruction. (CBI)

Please review each statement. If this statement has been a barrier to the implementation and/or maintenance of CBI for your program at your institution, please place a check under "yes." If this statement has not been a barrier to the implementation and/or maintenance of CBI for your program at your institution, please place a check under "no." If you are not sure if the statement has been a barrier to the implementation and/or maintenance of CBI for your program, please place a check under "don't know."

Statements

	Organizational Barriers	a barrier?		
		yes	no	don't know
0- 1	Faculty are not provided release time needed to develop CBI system format.	___	___	___
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	___	___	___
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	___	___	___
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	___	___	___
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	___	___	___
0- 6	Students may require greater time to master competencies in a CBI system.	___	___	___

	Barriers To Implementing And/Or Maintaining Competency-Based Instruction	a barrier?		
		yes	no	don't know
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	___	___	___
0- 8	Faculty have little access to clerical help needed for CBI development,implementation, and maintenance.	___	___	___
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	___	___	___
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	___	___	___
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	___	___	___
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	___	___	___
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	___	___	___
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	___	___	___
	Interpersonal Barriers			
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	___	___	___
I- 2	Many inservice, workshops, and conferences are not competency-based.	___	___	___
I- 3	State approved teacher education programs are not competency-based.	___	___	___

	Barriers To Implementing And/Or Maintaining Competency-Based Instruction	a barrier?		
		yes	no	don't know
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	___	___	___
I- 5	Faculty have insufficient knowledge of CBI.	___	___	___
I- 6	Faculty believe CBI will make new demands on their time.	___	___	___
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	___	___	___
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	___	___	___
I- 9	Faculty have responsibility for CBI program development, but lack skills.	___	___	___
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	___	___	___
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	___	___	___

Material Barriers

M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	___	___	___
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	___	___	___
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	___	___	___
M- 4	Facilities are not appropriate for CBI.	___	___	___

	Barriers To Implementing And/Or Maintaining Competency-Based Instruction	a barrier?		
		yes	no	don't know
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	___	___	___
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	___	___	___
M- 7	State funding for educational instruction is not sufficient for CBI programs.	___	___	___

APPENDIX D

Texas Public Community and Technical Colleges Participating in the Assessment of Competency-Based Instruction

Appendix D

Texas Public Community and Technical Colleges Participating in the Assessment of Competency-Based Instruction

Alvin Community College
Amarillo College
Angelina College
Austin Community College
Bee County College
Blinn College
Brazosport College
Central Texas College
Cisco Junior College
Cooke County College
Collin County Community College
North Lake College
Richland College
El Paso Community College
Frank Phillips Community College
Galveston College
Hill College
Houston Community College
Howard College at Big Spring
Kilgore College
Lamar Institution of Technology at Beaumont
Lamar University at Orange
Lamar University at Port Arthur
Laredo Junior College
Lee College
McLennan Community College
Midland College
Northeast Texas Community College
Northlake College
Odessa College
Palo Alto College
Panola College
Paris Junior College
Ranger Junior College
San Antonio College
San Jacinto College-Central Campus
San Jacinto College-North Campus
San Jacinto College-South Campus
South Plains College
St. Philip's College

Texas Southmost College-U.T. Brownsville
Texas State Technical College-Amarillo
Texas State Technical College-Harlingen
Texas State Technical College-Sweetwater
Trinity Valley Community College
Tyler Junior College
Vernon Regional Junior College
The Victoria College
Weatherford College
Western Texas College

APPENDIX E

Evaluation Report

Appendix E

Mr. Don Taylor, third party evaluator, will submit the report of the third party evaluation directly to Dr. Anne Auvenshine, Associate Director, Community and Technical College Division of the Texas Higher Education Coordinating Board. A copy of the third party evaluation report for the project will be mailed to Dr. Bill E. Lovelace, Project Director

FINAL REPORT

VOLUME II

ASSESSMENT OF COMPETENCY-BASED INSTRUCTION

Bill E. Lovelace
Suzanne V. LaBrecque

Sponsored By:

The Texas Higher Education Coordinating Board
Community and Technical Colleges Division
Austin, Texas

Conducted By:

The University of North Texas
School of Merchandising and Hospitality Management
Denton, Texas

June 30, 1993

FUNDING INFORMATION

Project Title:	Assessment of Competency-Based Instruction
Coordinating Board Project Number:	33130001
Funding Source:	Public Law 101-392, Title II A Texas Higher Education Coordinating Board
Coordinating Board Staff Advisor:	Dr. Bob Lahti, Program Director Community and Technical Colleges Division Texas Higher Education Coordinating Board Austin, Texas
Project Staff:	Dr. Suzanne V. LaBrecque, Administrator Dr. Bill E. Lovelace, Project Director Paige Parsons, Research Assistant School of Merchandising and Hospitality Management University of North Texas Denton, Texas
Disclaimer:	This publication was prepared pursuant to a contract with the Texas Higher Education Coordinating Board, Community and Technical Colleges Division. Contractors undertaking such projects are encouraged to express freely their judgement in professional and technical matters. Points of view or opinions do not, therefore, necessarily represent official Texas Higher Education Coordinating Board position or policy.

ACKNOWLEDGEMENTS

The project staff expresses sincere appreciation to the following individuals who provided guidance and expertise to the project staff by serving as members of the project advisory committee.

Dr. Bill Barnes
Texas State Technical College
Sweetwater, Texas

Ms. Shirley Chenault
Weatherford College
Weatherford, Texas

Dr. Barbara Eubanks
Collin County Community College
McKinney, Texas

Mr. Victor Fuhro
U.T. at Brownsville
Brownsville, Texas

Dr. Bob Lahti
Texas Higher Education
Coordinating Board
Austin, Texas

Dr. Ron Johnston
Panola College
Carthage, Texas

Mr. A.L. Pollard
McLennan Community College
Waco, Texas

Dr. Gary Stretcher
Frank Phillips College
Borger, Texas

Dr. Jerry Wilson
Lamar University
Beaumont, Texas

We appreciate the assistance provided to the project by the individuals who assisted in identifying the characteristic of a Gender Equity Program by responding to a Delphi study. The individuals who served as panelist for the Delphi study were:

Dr. Bill Barnes
Texas State Technical College
Sweetwater, Texas

Ms. Shirley Chenault
Weatherford College
Weatherford, Texas

Dr. Barbara Eubanks
Collin County Community College
McKinney, Texas

Mr. Victor Fuhro
U.T. at Brownsville
Brownsville, Texas

Dr. Ron Johnston
Panola College
Carthage, Texas

Mr. A.L. Pollard
McLennan Community College
Waco, Texas

ACKNOWLEDGMENTS (CON'T)

Dr. Gary Stretcher
Frank Phillips College
Borger, Texas

Dr. Jack Foreman
Texas State Technical
College-Marshall
Marshall, Texas

Jerry Wilson
Lamar University
Beaumont, Texas

Dr. Eugenia Travis
Northeast Texas
Community College
Mt. Pleasant, Texas

We are also grateful to each of the dean/directors at each of the community and technical colleges. The deans/directors greatly assisted the project staff by distributing and collecting the individual questionnaires at their respective campuses. Special appreciation is extended to Mr. Don Taylor who served as the third party evaluator of the project's installation, process, and products.

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I. Introduction 1
II. Presentation of Findings 1
III. Model for Evaluations 1

I. INTRODUCTION

The Final Report of the "Assessment of Competency-Based Instruction" could not appropriately be presented in one document. Volume I of the report contained the rationale (Introduction), procedures, an overview of the presentation of findings, and the summary, conclusions, and recommendations of the project. Volume II of the report was prepared to present the responses to the assessment made for each reporting technical education instructional program area and the evaluation model developed by the project.

II. PRESENTATION OF RESPONSES BY INSTRUCTIONAL PROGRAM AREAS

Degree of Implementation

The responses of instructors and program chairs/directors/leaders to the degree of the implementation of CBI by program area are presented in TABLE 1 through 49.

Barriers to CBI

The responses of instructors and program chairs/directors/leaders as to their perception of the barriers to CBI implementations are presented by instructional program area in TABLE 50 through 96.

III. EVALUATION MODEL

One of the project products was a "Model for Evaluating Competency-Based Instruction." The model was developed for use as a guide in conducting the statewide assessment of CBI. A copy of the evaluation model is presented following Table 96. A copy of the model was included in the summary report of the project.

TABLE 1

Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Agricultural Business and Production Area of Postsecondary Occupational Education Programs

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	90.91%	3
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	81.82%	3
3	The occupational competencies are sequenced for instructional purposes.	72.73%	3
4	The occupational competencies are clustered for course development.	63.64%	3
5	Occupational program courses are named and described.	90.91%	4
6	The prerequisite courses are identified and listed.	90.91%	4
7	The support courses are identified and listed.	90.91%	4
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	100.00%	3
9	Legitimate or validated career ladder exit points are identified in the curriculum.	27.27%	3
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	90.91%	3
11	Occupational competency profiles are developed for the occupational curriculum (program).	54.55%	2

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	81.82%	3
13	Objectives are written in performance terms for each occupational task.	63.64%	3
14	Enabling objectives are written for each task performance objective.	54.55%	2
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	90.91%	3
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	90.91%	3
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	81.82%	3
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	72.73%	4
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	81.82%	3
20	The student is informed of the required competencies and/or tasks prior to instruction.	81.82%	3
21	Learning time is flexible.	81.82%	3
22	Learning is guided by feedback.	100.00%	3
23	Students are informed of performance measures in advance of instruction for each task.	90.91%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	81.82%	3
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	72.73%	3
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	54.55%	3
27	Students are required to perform each task in a joblike setting.	72.73%	3
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	81.82%	2
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	81.82%	3
30	The instructor is a manager and facilitator of learning.	100.00%	4
31	The delivery of instruction is appropriate for the different learning styles of students.	100.00%	3
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	54.55%	2
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	54.55%	3
34	Task and competency progress records are maintained for each student.	63.64%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	81.82%	3
36	Student progress is determined by criterion-referenced measurement.	72.73%	3
37	Competency Profiles are kept current for each student.	36.36%	2
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	54.55%	3
39	A copy of the students' competency profile is included in the students' permanent records.	18.18%	3
40	Students exiting a program are provided with a copy of their competency profile.	9.09%	4
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	36.36%	2
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	72.73%	3
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	54.55%	2
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	81.82%	3
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	81.82%	3
46	The competency exams are totally performance measured.	45.45%	3

	Characteristics:	Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	81.82%	3
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	36.36%	3
49	Criteria for passing performance tests are acceptable for on-the-job performance.	72.73%	3
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	54.55%	3
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	81.82%	2
52	The same criteria stated in the instructional objective are used in the performance test (exam).	72.73%	3

TABLE 2

Implementation of Competency-Based Instruction as Perceived by Instructors in the Agricultural Business and Production Program Area of Postsecondary Occupational Education Programs

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	87.50%	4
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	87.50%	3
3	The occupational competencies are sequenced for instructional purposes.	87.50%	3
4	The occupational competencies are clustered for course development.	50.00%	4
5	Occupational program courses are named and described.	75.00%	4
6	The prerequisite courses are identified and listed.	75.00%	4
7	The support courses are identified and listed.	75.00%	3
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	87.50%	4
9	Legitimate or validated career ladder exit points are identified in the curriculum.	00.00%	0
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	87.50%	4
11	Occupational competency profiles are developed for the occupational curriculum (program).	62.50%	2

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	62.50%	3
13	Objectives are written in performance terms for each occupational task.	50.00%	3
14	Enabling objectives are written for each task performance objective.	50.00%	4
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	87.50%	4
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	87.50%	4
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	50.00%	4
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	75.00%	3
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	75.00%	4
20	The student is informed of the required competencies and/or tasks prior to instruction.	87.50%	3
21	Learning time is flexible.	87.50%	4
22	Learning is guided by feedback.	87.50%	4
23	Students are informed of performance measures in advance of instruction for each task.	87.50%	4

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	87.50%	4
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	87.50%	3
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	75.00%	3
27	Students are required to perform each task in a joblike setting.	50.00%	4
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	75.00%	3
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	87.50%	3
30	The instructor is a manager and facilitator of learning.	87.50%	4
31	The delivery of instruction is appropriate for the different learning styles of students.	87.50%	4
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	100.00%	4
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	75.00%	3
34	Task and competency progress records are maintained for each student.	87.50%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	87.50%	4
36	Student progress is determined by criterion-referenced measurement.	87.50%	3
37	Competency Profiles are kept current for each student.	37.50%	3
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	87.50%	4
39	A copy of the students' competency profile is included in the students' permanent records.	37.50%	3
40	Students exiting a program are provided with a copy of their competency profile.	25.00%	6
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	37.50%	3
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	75.00%	4
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	62.50%	3
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	62.50%	4
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	75.00%	4
46	The competency exams are totally performance measured.	25.00%	4

	Characteristics:	Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	87.50%	4
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	37.50%	3
49	Criteria for passing performance tests are acceptable for on-the-job performance.	75.00%	3
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	62.50%	3
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	62.50%	3
52	The same criteria stated in the instructional objective are used in the performance test (exam).	75.00%	4

TABLE 3

Part 2

Barriers to the Implementation of Competency-Based Instruction as Perceived by Instructors in the Agricultural Business and Production Program Area of Postsecondary Occupational Education Programs.

	Barriers:	Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	25.00%	12.50%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	00.00%	75.00%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	37.50%	25.00%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	00.00%	12.50%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	50.00%	12.50%
0- 6	Students may require greater time to master competencies in a CBI system.	62.50%	25.00%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	37.50%	62.50%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	50.00%	12.50%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	12.50%	75.00%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	12.50%	75.00%

Barriers		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	12.50%	87.50%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	25.00%	25.00%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	25.00%	25.00%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	50.00%	12.50%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	25.00%	37.50%
I- 2	Many inservice, workshops, and conferences are not competency-based.	25.00%	37.50%
I- 3	State approved teacher education programs are not competency-based.	25.00%	62.50%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	12.50%	37.50%
I- 5	Faculty have insufficient knowledge of CBI.	37.50%	37.50%
I- 6	Faculty believe CBI will make new demands on their time.	25.00%	50.00%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	00.00%	62.50%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	00.00%	50.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development,but lack skill.	12.50%	25.00%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	37.50%	37.50%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	00.00%	37.50%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	25.00%	50.00%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	25.00%	50.00%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	12.50%	87.50%
M- 4	Facilities are not appropriate for CBI.	12.50%	37.50%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	50.00%	25.00%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	12.50%	25.00%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	25.00%	62.50%

TABLE 4

Implementation of Competency-Based Instruction as Perceived by Instructors in the Agricultural Sciences Area of Postsecondary Occupational Education Programs

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	100.00%	4
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	100.00%	3
3	The occupational competencies are sequenced for instructional purposes.	100.00%	3
4	The occupational competencies are clustered for course development.	100.00%	4
5	Occupational program courses are named and described.	100.00%	4
6	The prerequisite courses are identified and listed.	100.00%	5
7	The support courses are identified and listed.	100.00%	4
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	00.00%	0
9	Legitimate or validated career ladder exit points are identified in the curriculum.	00.00%	0
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	100.00%	3
11	Occupational competency profiles are developed for the occupational curriculum (program).	00.00%	0

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	100.00%	5
13	Objectives are written in performance terms for each occupational task.	100.00%	5
14	Enabling objectives are written for each task performance objective.	00.00%	0
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	100.00%	3
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	100.00%	4
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	100.00%	4
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	100.00%	2
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	100.00%	3
20	The student is informed of the required competencies and/or tasks prior to instruction.	100.00%	5
21	Learning time is flexible.	00.00%	0
22	Learning is guided by feedback.	100.00%	4
23	Students are informed of performance measures in advance of instruction for each task.	100.00%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	100.00%	3
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	00.00%	0
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	00.00%	0
27	Students are required to perform each task in a joblike setting.	100.00%	2
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	100.00%	4
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	100.00%	3
30	The instructor is a manager and facilitator of learning.	100.00%	4
31	The delivery of instruction is appropriate for the different learning styles of students.	100.00%	3
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	100.00%	4
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	100.00%	4
34	Task and competency progress records are maintained for each student.	100.00%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	100.00%	4
36	Student progress is determined by criterion-referenced measurement.	100.00%	4
37	Competency Profiles are kept current for each student.	00.00%	0
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	100.00%	3
39	A copy of the students' competency profile is included in the students' permanent records.	00.00%	0
40	Students exiting a program are provided with a copy of their competency profile.	00.00%	0
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	00.00%	0
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	100.00%	4
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	00.00%	0
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	100.00%	4
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	100.00%	3
46	The competency exams are totally performance measured.	00.00%	0

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	100.00%	4
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	00.00%	0
49	Criteria for passing performance tests are acceptable for on-the-job performance.	100.00%	3
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	00.00%	0
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	00.00%	0
52	The same criteria stated in the instructional objective are used in the performance test (exam).	00.00%	0

TABLE 5

Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Conservation and Renewable Natural Resources Area of Postsecondary Occupational Education Programs

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	100.00%	4
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	100.00%	3
3	The occupational competencies are sequenced for instructional purposes.	100.00%	3
4	The occupational competencies are clustered for course development.	100.00%	3
5	Occupational program courses are named and described.	100.00%	2
6	The prerequisite courses are identified and listed.	100.00%	1
7	The support courses are identified and listed.	100.00%	1
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	100.00%	1
9	Legitimate or validated career ladder exit points are identified in the curriculum.	100.00%	1
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	100.00%	1
11	Occupational competency profiles are developed for the occupational curriculum (program).	100.00%	1

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	100.00%	1
13	Objectives are written in performance terms for each occupational task.	100.00%	1
14	Enabling objectives are written for each task performance objective.	100.00%	1
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	100.00%	1
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	100.00%	1
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	100.00%	1
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	100.00%	1
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	100.00%	1
20	The student is informed of the required competencies and/or tasks prior to instruction.	100.00%	1
21	Learning time is flexible.	00.00%	0
22	Learning is guided by feedback.	00.00%	0
23	Students are informed of performance measures in advance of instruction for each task.	00.00%	0

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	00.00%	0
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	00.00%	0
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	00.00%	0
27	Students are required to perform each task in a joblike setting.	00.00%	0
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	00.00%	0
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	00.00%	0
30	The instructor is a manager and facilitator of learning.	00.00%	0
31	The delivery of instruction is appropriate for the different learning styles of students.	00.00%	0
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	00.00%	0
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	00.00%	0
34	Task and competency progress records are maintained for each student.	00.00%	0

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	00.00%	0
36	Student progress is determined by criterion-referenced measurement.	00.00%	0
37	Competency Profiles are kept current for each student.	00.00%	0
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	00.00%	0
39	A copy of the students' competency profile is included in the students' permanent records.	00.00%	0
40	Students exiting a program are provided with a copy of their competency profile.	00.00%	0
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	00.00%	0
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	00.00%	0
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	00.00%	0
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	00.00%	0
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	00.00%	0
46	The competency exams are totally performance measured.	00.00%	0

	Characteristics:	Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	00.00%	0
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	00.00%	0
49	Criteria for passing performance tests are acceptable for on-the-job performance.	00.00%	0
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	00.00%	0
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	00.00%	0
52	The same criteria stated in the instructional objective are used in the performance test (exam).	00.00%	0

TABLE 6

Implementation of Competency-Based Instruction as Perceived by Instructors in the Conservation and Renewable Natural Resources Area of Postsecondary Occupational Education Programs

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	100.00%	3
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	50.00%	3
3	The occupational competencies are sequenced for instructional purposes.	100.00%	4
4	The occupational competencies are clustered for course development.	100.00%	3
5	Occupational program courses are named and described.	100.00%	5
6	The prerequisite courses are identified and listed.	100.00%	4
7	The support courses are identified and listed.	100.00%	3
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	100.00%	3
9	Legitimate or validated career ladder exit points are identified in the curriculum.	50.00%	3
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	50.00%	5
11	Occupational competency profiles are developed for the occupational curriculum (program).	100.00%	2

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Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	100.00%	2
13	Objectives are written in performance terms for each occupational task.	100.00%	1
14	Enabling objectives are written for each task performance objective.	100.00%	1
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	100.00%	3
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	100.00%	4
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	100.00%	2
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	00.00%	00
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	100.00%	4
20	The student is informed of the required competencies and/or tasks prior to instruction.	50.00%	4
21	Learning time is flexible.	100.00%	3
22	Learning is guided by feedback.	100.00%	4
23	Students are informed of performance measures in advance of instruction for each task.	100.00%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	100.00%	3
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	00.00%	00
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	00.00%	00
27	Students are required to perform each task in a joblike setting.	100.00%	4
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	100.00%	3
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	100.00%	3
30	The instructor is a manager and facilitator of learning.	100.00%	3
31	The delivery of instruction is appropriate for the different learning styles of students.	100.00%	3
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	50.00%	4
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	50.00%	4
34	Task and competency progress records are maintained for each student.	00.00%	00

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	50.00%	4
36	Student progress is determined by criterion-referenced measurement.	50.00%	4
37	Competency Profiles are kept current for each student.	50.00%	2
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	100.00%	3
39	A copy of the students' competency profile is included in the students' permanent records.	50.00%	2
40	Students exiting a program are provided with a copy of their competency profile.	50.00%	3
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	50.00%	2
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	100.00%	3
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	50.00%	2
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	100.00%	4
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	50.00%	3
46	The competency exams are totally performance measured.	50.00%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	100.00%	2
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	00.00%	00
49	Criteria for passing performance tests are acceptable for on-the-job performance.	50.00%	1
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	50.00%	1
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	50.00%	1
52	The same criteria stated in the instructional objective are used in the performance test (exam).	50.00%	4

TABLE 7

Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Architecture and Related Programs Area of Postsecondary Occupational Education Programs

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	100.00%	1
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	100.00%	1
3	The occupational competencies are sequenced for instructional purposes.	100.00%	5
4	The occupational competencies are clustered for course development.	100.00%	4
5	Occupational program courses are named and described.	100.00%	5
6	The prerequisite courses are identified and listed.	100.00%	5
7	The support courses are identified and listed.	100.00%	5
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	100.00%	4
9	Legitimate or validated career ladder exit points are identified in the curriculum.	100.00%	3
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	100.00%	3
11	Occupational competency profiles are developed for the occupational curriculum (program).	0.00%	0

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	00.00%	0
13	Objectives are written in performance terms for each occupational task.	00.00%	0
14	Enabling objectives are written for each task performance objective.	00.00%	0
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	00.00%	0
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	00.00%	0
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	00.00%	0
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	00.00%	0
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	00.00%	0
20	The student is informed of the required competencies and/or tasks prior to instruction.	00.00%	0
21	Learning time is flexible.	00.00%	0
22	Learning is guided by feedback.	00.00%	0
23	Students are informed of performance measures in advance of instruction for each task.	00.00%	0

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	00.00%	0
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	00.00%	0
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	00.00%	0
27	Students are required to perform each task in a joblike setting.	00.00%	0
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	00.00%	0
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	00.00%	0
30	The instructor is a manager and facilitator of learning.	00.00%	0
31	The delivery of instruction is appropriate for the different learning styles of students.	00.00%	0
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	00.00%	0
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	00.00%	0
34	Task and competency progress records are maintained for each student.	00.00%	0

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	00.00%	0
36	Student progress is determined by criterion-referenced measurement.	00.00%	0
37	Competency Profiles are kept current for each student.	00.00%	0
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	00.00%	0
39	A copy of the students' competency profile is included in the students' permanent records.	00.00%	0
40	Students exiting a program are provided with a copy of their competency profile.	00.00%	0
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	00.00%	0
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	00.00%	0
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	00.00%	0
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	00.00%	0
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	00.00%	0
46	The competency exams are totally performance measured.	00.00%	0

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	00.00%	0
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	00.00%	0
49	Criteria for passing performance tests are acceptable for on-the-job performance.	00.00%	0
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	00.00%	0
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	00.00%	0
52	The same criteria stated in the instructional objective are used in the performance test (exam).	00.00%	0

TABLE 8

Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Marketing Operations/Marketing and Distribution Area of Postsecondary Occupational Education Programs

	Characteristics:	Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	70.00%	3
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	40.00%	2
3	The occupational competencies are sequenced for instructional purposes.	80.00%	3
4	The occupational competencies are clustered for course development.	80.00%	3
5	Occupational program courses are named and described.	100.00%	4
6	The prerequisite courses are identified and listed.	100.00%	4
7	The support courses are identified and listed.	100.00%	4
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	80.00%	3
9	Legitimate or validated career ladder exit points are identified in the curriculum.	60.00%	2
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	100.00%	4
11	Occupational competency profiles are developed for the occupational curriculum (program).	60.00%	2

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	70.00%	2
13	Objectives are written in performance terms for each occupational task.	50.00%	3
14	Enabling objectives are written for each task performance objective.	50.00%	3
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	100.00%	3
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	100.00%	3
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	50.00%	3
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	30.00%	4
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	40.00%	3
20	The student is informed of the required competencies and/or tasks prior to instruction.	70.00%	4
21	Learning time is flexible.	50.00%	2
22	Learning is guided by feedback.	100.00%	3
23	Students are informed of performance measures in advance of instruction for each task.	60.00%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	70.00%	3
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	40.00%	2
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	40.00%	2
27	Students are required to perform each task in a joblike setting.	20.00%	3
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	30.00%	4
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	80.00%	3
30	The instructor is a manager and facilitator of learning.	100.00%	4
31	The delivery of instruction is appropriate for the different learning styles of students.	100.00%	3
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	40.00%	3
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	40.00%	2
34	Task and competency progress records are maintained for each student.	30.00%	2

	Characteristics:	Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	60.00%	3
36	Student progress is determined by criterion-referenced measurement.	40.00%	3
37	Competency Profiles are kept current for each student.	10.00%	3
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	30.00%	3
39	A copy of the students' competency profile is included in the students' permanent records.	00.00%	0
40	Students exiting a program are provided with a copy of their competency profile.	00.00%	0
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	00.00%	0
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	00.00%	0
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	00.00%	0
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	00.00%	0
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	00.00%	0
46	The competency exams are totally performance measured.	00.00%	0

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	00.00%	0
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	00.00%	0
49	Criteria for passing performance tests are acceptable for on-the-job performance.	00.00%	0
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	00.00%	0
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	00.00%	0
52	The same criteria stated in the instructional objective are used in the performance test (exam).	00.00%	0

TABLE 9

Implementation of Competency-Based Instruction as Perceived by Instructors in the Marketing Operations/Marketing and Distribution Area of Postsecondary Occupational Education Programs

	Characteristics:	Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	75.00%	3
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	66.67%	3
3	The occupational competencies are sequenced for instructional purposes.	66.67%	3
4	The occupational competencies are clustered for course development.	83.33%	3
5	Occupational program courses are named and described.	91.67%	4
6	The prerequisite courses are identified and listed.	91.67%	4
7	The support courses are identified and listed.	83.33%	4
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	75.00%	3
9	Legitimate or validated career ladder exit points are identified in the curriculum.	66.67%	3
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	75.00%	4
11	Occupational competency profiles are developed for the occupational curriculum (program).	41.67%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	41.67%	3
13	Objectives are written in performance terms for each occupational task.	16.67%	4
14	Enabling objectives are written for each task performance objective.	25.00%	4
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	66.67%	4
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	66.67%	3
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	41.67%	3
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	16.67%	4
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	58.33%	3
20	The student is informed of the required competencies and/or tasks prior to instruction.	75.00%	4
21	Learning time is flexible.	66.67%	3
22	Learning is guided by feedback.	91.67%	4
23	Students are informed of performance measures in advance of instruction for each task.	66.67%	4

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	58.33%	4
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	33.33%	5
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	25.00%	4
27	Students are required to perform each task in a joblike setting.	25.00%	3
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	41.67%	4
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	91.67%	3
30	The instructor is a manager and facilitator of learning.	100.00%	4
31	The delivery of instruction is appropriate for the different learning styles of students.	100.00%	3
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	58.33%	3
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	33.33%	3
34	Task and competency progress records are maintained for each student.	50.00%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	83.33%	3
36	Student progress is determined by criterion-referenced measurement.	58.33%	3
37	Competency Profiles are kept current for each student.	25.00%	4
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	33.33%	3
39	A copy of the students' competency profile is included in the students' permanent records.	16.67%	3
40	Students exiting a program are provided with a copy of their competency profile.	16.67%	4
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	25.00%	4
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	58.33%	3
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	33.33%	3
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	83.33%	4
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	25.00%	3
46	The competency exams are totally performance measured.	25.00%	4

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	75.00%	3
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	25.00%	3
49	Criteria for passing performance tests are acceptable for on-the-job performance.	41.67%	3
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	33.33%	3
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	50.00%	2
52	The same criteria stated in the instructional objective are used in the performance test (exam).	100.00%	4

TABLE 10

Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Communications Area of Postsecondary Occupational Education Programs

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	100.00%	3
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	100.00%	3
3	The occupational competencies are sequenced for instructional purposes.	100.00%	4
4	The occupational competencies are clustered for course development.	100.00%	4
5	Occupational program courses are named and described.	100.00%	4
6	The prerequisite courses are identified and listed.	66.67%	5
7	The support courses are identified and listed.	66.67%	5
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	100.00%	4
9	Legitimate or validated career ladder exit points are identified in the curriculum.	33.33%	5
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	100.00%	4
11	Occupational competency profiles are developed for the occupational curriculum (program).	0.00%	0

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	00.00%	0
13	Objectives are written in performance terms for each occupational task.	00.00%	0
14	Enabling objectives are written for each task performance objective.	00.00%	0
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	00.00%	0
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	00.00%	0
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	00.00%	0
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	00.00%	0
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	00.00%	0
20	The student is informed of the required competencies and/or tasks prior to instruction.	00.00%	0
21	Learning time is flexible.	00.00%	0
22	Learning is guided by feedback.	00.00%	0
23	Students are informed of performance measures in advance of instruction for each task.	00.00%	0

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	00.00%	0
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	00.00%	0
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	00.00%	0
27	Students are required to perform each task in a joblike setting.	00.00%	0
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	00.00%	0
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	00.00%	0
30	The instructor is a manager and facilitator of learning.	00.00%	0
31	The delivery of instruction is appropriate for the different learning styles of students.	00.00%	0
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	00.00%	0
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	00.00%	0
34	Task and competency progress records are maintained for each student.	00.00%	0

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	00.00%	0
36	Student progress is determined by criterion-referenced measurement.	00.00%	0
37	Competency Profiles are kept current for each student.	00.00%	0
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	00.00%	0
39	A copy of the students' competency profile is included in the students' permanent records.	00.00%	0
40	Students exiting a program are provided with a copy of their competency profile.	00.00%	0
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	00.00%	0
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	00.00%	0
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	00.00%	0
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	00.00%	0
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	00.00%	0
46	The competency exams are totally performance measured.	00.00%	0

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	00.00%	0
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	00.00%	0
49	Criteria for passing performance tests are acceptable for on-the-job performance.	00.00%	0
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	00.00%	0
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	00.00%	0
52	The same criteria stated in the instructional objective are used in the performance test (exam).	00.00%	0

TABLE 11

Implementation of Competency-Based Instruction as Perceived by Instructors in the Communications Area of Postsecondary Occupational Education Programs

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	100.00%	3
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	100.00%	3
3	The occupational competencies are sequenced for instructional purposes.	100.00%	3
4	The occupational competencies are clustered for course development.	100.00%	3
5	Occupational program courses are named and described.	100.00%	4
6	The prerequisite courses are identified and listed.	100.00%	4
7	The support courses are identified and listed.	80.00%	4
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	100.00%	3
9	Legitimate or validated career ladder exit points are identified in the curriculum.	40.00%	3
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	100.00%	4
11	Occupational competency profiles are developed for the occupational curriculum (program).	40.00%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	80.00%	3
13	Objectives are written in performance terms for each occupational task.	100.00%	3
14	Enabling objectives are written for each task performance objective.	80.00%	3
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	80.00%	4
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	100.00%	4
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	80.00%	3
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	60.00%	4
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	100.00%	3
20	The student is informed of the required competencies and/or tasks prior to instruction.	100.00%	4
21	Learning time is flexible.	100.00%	3
22	Learning is guided by feedback.	100.00%	4
23	Students are informed of performance measures in advance of instruction for each task.	100.00%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	100.00%	3
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	100.00%	4
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	80.00%	4
27	Students are required to perform each task in a joblike setting.	100.00%	3
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	80.00%	3
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	100.00%	4
30	The instructor is a manager and facilitator of learning.	100.00%	3
31	The delivery of instruction is appropriate for the different learning styles of students.	100.00%	3
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	80.00%	3
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	80.00%	2
34	Task and competency progress records are maintained for each student.	60.00%	2

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	80.00%	3
36	Student progress is determined by criterion-referenced measurement.	60.00%	2
37	Competency Profiles are kept current for each student.	60.00%	2
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	80.00%	3
39	A copy of the students' competency profile is included in the students' permanent records.	40.00%	1
40	Students exiting a program are provided with a copy of their competency profile.	20.00%	1
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	20.00%	2
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	80.00%	3
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	60.00%	3
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	100.00%	3
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	80.00%	3
46	The competency exams are totally performance measured.	60.00%	3

	Characteristics:	Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	100.00%	4
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	40.00%	3
49	Criteria for passing performance tests are acceptable for on-the-job performance.	100.00%	3
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	100.00%	3
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	60.00%	2
52	The same criteria stated in the instructional objective are used in the performance test (exam).	80.00%	3

TABLE 12

Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Communications Technologies Area of Postsecondary Occupational Education Programs

	Characteristics:	Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	100.00%	4
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	100.00%	3
3	The occupational competencies are sequenced for instructional purposes.	100.00%	4
4	The occupational competencies are clustered for course development.	100.00%	4
5	Occupational program courses are named and described.	100.00%	4
6	The prerequisite courses are identified and listed.	100.00%	4
7	The support courses are identified and listed.	100.00%	3
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	100.00%	4
9	Legitimate or validated career ladder exit points are identified in the curriculum.	00.00%	0
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	00.00%	0
11	Occupational competency profiles are developed for the occupational curriculum (program).	00.00%	0

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	00.00%	0
13	Objectives are written in performance terms for each occupational task.	00.00%	0
14	Enabling objectives are written for each task performance objective.	00.00%	0
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	00.00%	0
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	00.00%	0
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	00.00%	0
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	00.00%	0
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	00.00%	0
20	The student is informed of the required competencies and/or tasks prior to instruction.	00.00%	0
21	Learning time is flexible.	00.00%	0
22	Learning is guided by feedback.	00.00%	0
23	Students are informed of performance measures in advance of instruction for each task.	00.00%	0

	Characteristics:	Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	00.00%	0
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	00.00%	0
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	00.00%	0
27	Students are required to perform each task in a joblike setting.	00.00%	0
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	00.00%	0
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	00.00%	0
30	The instructor is a manager and facilitator of learning.	00.00%	0
31	The delivery of instruction is appropriate for the different learning styles of students.	00.00%	0
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	00.00%	0
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	00.00%	0
34	Task and competency progress records are maintained for each student.	00.00%	0

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	00.00%	0
36	Student progress is determined by criterion-referenced measurement.	00.00%	0
37	Competency Profiles are kept current for each student.	00.00%	0
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	00.00%	0
39	A copy of the students' competency profile is included in the students' permanent records.	00.00%	0
40	Students exiting a program are provided with a copy of their competency profile.	00.00%	0
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	00.00%	0
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	00.00%	0
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	00.00%	0
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	00.00%	0
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	00.00%	0
46	The competency exams are totally performance measured.	00.00%	0

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	00.00%	0
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	00.00%	0
49	Criteria for passing performance tests are acceptable for on-the-job performance.	00.00%	0
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	00.00%	0
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	00.00%	0
52	The same criteria stated in the instructional objective are used in the performance test (exam).	00.00%	0

TABLE 13

Implementation of Competency-Based Instruction as Perceived by Instructors in the Communications Technologies Area of Postsecondary Occupational Education Programs

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	100.00%	3
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	100.00%	2
3	The occupational competencies are sequenced for instructional purposes.	100.00%	2
4	The occupational competencies are clustered for course development.	33.33%	3
5	Occupational program courses are named and described.	66.67%	3
6	The prerequisite courses are identified and listed.	100.00%	3
7	The support courses are identified and listed.	100.00%	4
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	100.00%	3
9	Legitimate or validated career ladder exit points are identified in the curriculum.	33.33%	1
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	100.00%	2
11	Occupational competency profiles are developed for the occupational curriculum (program).	33.33%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	100.00%	2
13	Objectives are written in performance terms for each occupational task.	100.00%	2
14	Enabling objectives are written for each task performance objective.	66.67%	2
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	33.33%	2
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	100.00%	2
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	33.33%	2
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	100.00%	2
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	100.00%	2
20	The student is informed of the required competencies and/or tasks prior to instruction.	66.67%	3
21	Learning time is flexible.	33.33%	3
22	Learning is guided by feedback.	100.00%	3
23	Students are informed of performance measures in advance of instruction for each task.	66.67%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	66.67%	3
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	66.67%	3
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	66.67%	2
27	Students are required to perform each task in a joblike setting.	33.33%	4
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	66.67%	2
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	66.67%	2
30	The instructor is a manager and facilitator of learning.	100.00%	2
31	The delivery of instruction is appropriate for the different learning styles of students.	100.00%	3
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	33.33%	2
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	33.33%	2
34	Task and competency progress records are maintained for each student.	66.67%	2

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	66.67%	3
36	Student progress is determined by criterion-referenced measurement.	66.67%	2
37	Competency Profiles are kept current for each student.	00.00%	0
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	00.00%	0
39	A copy of the students' competency profile is included in the students' permanent records.	00.00%	0
40	Students exiting a program are provided with a copy of their competency profile.	00.00%	0
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	00.00%	0
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	00.00%	0
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	00.00%	0
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	00.00%	0
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	00.00%	0
46	The competency exams are totally performance measured.	00.00%	0

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	00.00%	0
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	00.00%	0
49	Criteria for passing performance tests are acceptable for on-the-job performance.	00.00%	0
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	00.00%	0
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	00.00%	0
52	The same criteria stated in the instructional objective are used in the performance test (exam).	00.00%	0

TABLE 14

Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Computer and Information ServicesArea of Postsecondary Occupational Education Programs

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	85.19%	3
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	66.67%	3
3	The occupational competencies are sequenced for instructional purposes.	96.30%	3
4	The occupational competencies are clustered for course development.	81.48%	3
5	Occupational program courses are named and described.	100.00%	4
6	The prerequisite courses are identified and listed.	100.00%	4
7	The support courses are identified and listed.	81.48%	4
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	96.30%	3
9	Legitimate or validated career ladder exit points are identified in the curriculum.	62.96%	3
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	100.00%	4
11	Occupational competency profiles are developed for the occupational curriculum (program).	44.44%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	85.19%	3
13	Objectives are written in performance terms for each occupational task.	70.37%	3
14	Enabling objectives are written for each task performance objective.	51.85%	3
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	96.30%	3
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	96.30%	3
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	59.26%	3
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	44.44%	3
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	66.67%	2
20	The student is informed of the required competencies and/or tasks prior to instruction.	88.89%	3
21	Learning time is flexible.	37.04%	3
22	Learning is guided by feedback.	88.89%	3
23	Students are informed of performance measures in advance of instruction for each task.	74.07%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	74.07%	3
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	37.04%	2
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	33.33%	2
27	Students are required to perform each task in a joblike setting.	44.44%	3
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	44.44%	3
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	92.59%	3
30	The instructor is a manager and facilitator of learning.	92.59%	3
31	The delivery of instruction is appropriate for the different learning styles of students.	81.48%	3
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	55.56%	3
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	44.44%	2
34	Task and competency progress records are maintained for each student.	44.44%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	66.67%	3
36	Student progress is determined by criterion-referenced measurement.	62.96%	3
37	Competency Profiles are kept current for each student.	25.93%	2
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	51.85%	2
39	A copy of the students' competency profile is included in the students' permanent records.	7.41%	4
40	Students exiting a program are provided with a copy of their competency profile.	3.70%	1
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	33.33%	3
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	77.78%	3
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	22.22%	2
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	81.48%	3
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	44.44%	2
46	The competency exams are totally performance measured.	29.63%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	85.19%	3
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	18.52%	2
49	Criteria for passing performance tests are acceptable for on-the-job performance.	48.15%	3
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	51.85%	3
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	29.63%	4
52	The same criteria stated in the instructional objective are used in the performance test (exam).	74.07%	3

TABLE 15

Implementation of Competency-Based Instruction as Perceived by Instructors in the Computer and Information Services Area of Postsecondary Occupational Education Programs

	Characteristics:	Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	90.20%	3
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	68.63%	3
3	The occupational competencies are sequenced for instructional purposes.	84.31%	3
4	The occupational competencies are clustered for course development.	82.35%	3
5	Occupational program courses are named and described.	94.12%	4
6	The prerequisite courses are identified and listed.	100.00%	4
7	The support courses are identified and listed.	84.31%	4
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	94.12%	3
9	Legitimate or validated career ladder exit points are identified in the curriculum.	62.75%	3
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	100.00%	3
11	Occupational competency profiles are developed for the occupational curriculum (program).	41.18%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	76.47%	3
13	Objectives are written in performance terms for each occupational task.	68.63%	3
14	Enabling objectives are written for each task performance objective.	52.94%	3
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	82.35%	3
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	94.12%	3
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	60.78%	3
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	62.75%	3
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	84.31%	3
20	The student is informed of the required competencies and/or tasks prior to instruction.	86.27%	3
21	Learning time is flexible.	50.98%	3
22	Learning is guided by feedback.	90.20%	3
23	Students are informed of performance measures in advance of instruction for each task.	82.35%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	80.39%	3
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	50.98%	2
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	41.18%	3
27	Students are required to perform each task in a joblike setting.	56.86%	3
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	68.63%	3
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	92.16%	3
30	The instructor is a manager and facilitator of learning.	98.04%	3
31	The delivery of instruction is appropriate for the different learning styles of students.	88.24%	3
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	56.86%	3
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	37.25%	3
34	Task and competency progress records are maintained for each student.	41.18%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	62.75%	3
36	Student progress is determined by criterion-referenced measurement.	49.02%	3
37	Competency Profiles are kept current for each student.	17.65%	2
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	58.82%	2
39	A copy of the students' competency profile is included in the students' permanent records.	5.88%	5
40	Students exiting a program are provided with a copy of their competency profile.	9.80%	2
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	39.22%	3
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	72.55%	3
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	35.29%	3
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	80.39%	3
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	56.86%	3
46	The competency exams are totally performance measured.	39.22%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	74.51%	3
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	21.57%	3
49	Criteria for passing performance tests are acceptable for on-the-job performance.	58.82%	3
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	56.86%	3
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	49.02%	3
52	The same criteria stated in the instructional objective are used in the performance test (exam).	80.39%	3

TABLE 16

Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Personal and Miscellaneous Services Area of Postsecondary Occupational Education Programs

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	94.12%	4
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	76.47%	4
3	The occupational competencies are sequenced for instructional purposes.	100.00%	4
4	The occupational competencies are clustered for course development.	100.00%	4
5	Occupational program courses are named and described.	100.00%	4
6	The prerequisite courses are identified and listed.	100.00%	4
7	The support courses are identified and listed.	94.12%	4
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	100.00%	4
9	Legitimate or validated career ladder exit points are identified in the curriculum.	64.71%	4
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	100.00%	4
11	Occupational competency profiles are developed for the occupational curriculum (program).	94.12%	4

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	88.24%	4
13	Objectives are written in performance terms for each occupational task.	88.24%	4
14	Enabling objectives are written for each task performance objective.	82.35%	3
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	100.00%	4
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	100.00%	4
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	94.12%	4
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	58.82%	4
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	94.12%	4
20	The student is informed of the required competencies and/or tasks prior to instruction.	94.12%	4
21	Learning time is flexible.	82.35%	4
22	Learning is guided by feedback.	100.00%	4
23	Students are informed of performance measures in advance of instruction for each task.	88.24%	4

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	88.24%	4
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	82.35%	4
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	76.47%	4
27	Students are required to perform each task in a joblike setting.	82.35%	4
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	82.35%	4
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	94.12%	4
30	The instructor is a manager and facilitator of learning.	100.00%	4
31	The delivery of instruction is appropriate for the different learning styles of students.	100.00%	4
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	94.12%	4
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	82.35%	3
34	Task and competency progress records are maintained for each student.	88.24%	4

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	94.12%	4
36	Student progress is determined by criterion-referenced measurement.	88.24%	4
37	Competency Profiles are kept current for each student.	70.59%	4
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	82.35%	4
39	A copy of the students' competency profile is included in the students' permanent records.	47.06%	4
40	Students exiting a program are provided with a copy of their competency profile.	23.53%	4
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	64.71%	4
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	88.24%	4
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	58.82%	3
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	94.12%	4
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	82.35%	4
46	The competency exams are totally performance measured.	58.82%	4

	Characteristics:	Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	94.12%	4
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	58.82%	4
49	Criteria for passing performance tests are acceptable for on-the-job performance.	82.35%	4
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	76.47%	4
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	64.71%	4
52	The same criteria stated in the instructional objective are used in the performance test (exam).	82.35%	4

TABLE 17

Implementation of Competency-Based Instruction as Perceived by Instructors in the Personal and Miscellaneous Services Area of Postsecondary Occupational Education Programs

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	88.24%	4
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	82.35%	3
3	The occupational competencies are sequenced for instructional purposes.	88.24%	4
4	The occupational competencies are clustered for course development.	94.12%	4
5	Occupational program courses are named and described.	94.12%	4
6	The prerequisite courses are identified and listed.	88.24%	4
7	The support courses are identified and listed.	52.94%	4
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	82.35%	3
9	Legitimate or validated career ladder exit points are identified in the curriculum.	58.82%	3
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	100.00%	4
11	Occupational competency profiles are developed for the occupational curriculum (program).	76.47%	4

	Characteristics:	Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	100.00%	4
13	Objectives are written in performance terms for each occupational task.	94.12%	4
14	Enabling objectives are written for each task performance objective.	88.24%	3
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	88.24%	4
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	100.00%	4
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	94.12%	4
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	58.82%	4
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	88.24%	4
20	The student is informed of the required competencies and/or tasks prior to instruction.	100.00%	4
21	Learning time is flexible.	70.59%	3
22	Learning is guided by feedback.	94.12%	4
23	Students are informed of performance measures in advance of instruction for each task.	94.12%	4

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	94.12%	4
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	88.24%	4
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	76.47%	4
27	Students are required to perform each task in a joblike setting.	94.12%	4
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	94.12%	3
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	100.00%	4
30	The instructor is a manager and facilitator of learning.	100.00%	4
31	The delivery of instruction is appropriate for the different learning styles of students.	94.12%	4
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	94.12%	4
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	94.12%	4
34	Task and competency progress records are maintained for each student.	94.12%	4

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	100.00%	4
36	Student progress is determined by criterion-referenced measurement.	100.00%	4
37	Competency Profiles are kept current for each student.	94.12%	3
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	76.47%	4
39	A copy of the students' competency profile is included in the students' permanent records.	76.47%	3
40	Students exiting a program are provided with a copy of their competency profile.	23.53%	4
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	58.82%	3
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	100.00%	4
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	58.82%	3
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	100.00%	3
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	76.47%	4
46	The competency exams are totally performance measured.	58.82%	4

	Characteristics:	Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	94.12%	4
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	70.59%	4
49	Criteria for passing performance tests are acceptable for on-the-job performance.	82.35%	4
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	94.12%	3
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	58.82%	4
52	The same criteria stated in the instructional objective are used in the performance test (exam).	88.24%	4

TABLE 18

Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Education Area of Postsecondary Occupational Education Programs

	Characteristics:	Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	100.00%	3
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	66.67%	3
3	The occupational competencies are sequenced for instructional purposes.	100.00%	3
4	The occupational competencies are clustered for course development.	66.67%	3
5	Occupational program courses are named and described.	100.00%	4
6	The prerequisite courses are identified and listed.	100.00%	3
7	The support courses are identified and listed.	33.33%	3
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	100.00%	3
9	Legitimate or validated career ladder exit points are identified in the curriculum.	100.00%	2
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	100.00%	4
11	Occupational competency profiles are developed for the occupational curriculum (program).	66.67%	4

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	66.67%	2
13	Objectives are written in performance terms for each occupational task.	66.67%	2
14	Enabling objectives are written for each task performance objective.	33.33%	4
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	66.67%	2
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	66.67%	3
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	66.67%	3
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	33.33%	5
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	100.00%	3
20	The student is informed of the required competencies and/or tasks prior to instruction.	66.67%	4
21	Learning time is flexible.	33.33%	1
22	Learning is guided by feedback.	66.67%	3
23	Students are informed of performance measures in advance of instruction for each task.	66.67%	4

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	66.67%	3
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	66.67%	3
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	33.33%	4
27	Students are required to perform each task in a joblike setting.	66.67%	3
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	66.67%	3
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	66.67%	4
30	The instructor is a manager and facilitator of learning.	100.00%	4
31	The delivery of instruction is appropriate for the different learning styles of students.	66.67%	2
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	66.67%	4
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	66.67%	2
34	Task and competency progress records are maintained for each student.	66.67%	3

	Characteristics:	Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	66.67%	3
36	Student progress is determined by criterion-referenced measurement.	66.67%	3
37	Competency Profiles are kept current for each student.	66.67%	3
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	66.67%	3
39	A copy of the students' competency profile is included in the students' permanent records.	33.33%	4
40	Students exiting a program are provided with a copy of their competency profile.	00.00%	0
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	00.00%	0
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	00.00%	0
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	00.00%	0
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	00.00%	0
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	00.00%	0
46	The competency exams are totally performance measured.	00.00%	0

Characteristics		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	00.00%	0
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	00.00%	0
49	Criteria for passing performance tests are acceptable for on-the-job performance.	00.00%	0
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	00.00%	0
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	00.00%	0
52	The same criteria stated in the instructional objective are used in the performance test (exam).	00.00%	0

TABLE 19

Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Technology Education/Industrial Arts Area of Postsecondary Occupational Education Programs

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	100.00%	4
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	100.00%	3
3	The occupational competencies are sequenced for instructional purposes.	100.00%	5
4	The occupational competencies are clustered for course development.	100.00%	5
5	Occupational program courses are named and described.	100.00%	5
6	The prerequisite courses are identified and listed.	100.00%	5
7	The support courses are identified and listed.	100.00%	5
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	100.00%	2
9	Legitimate or validated career ladder exit points are identified in the curriculum.	100.00%	3
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	100.00%	4
11	Occupational competency profiles are developed for the occupational curriculum (program).	100.00%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	100.00%	5
13	Objectives are written in performance terms for each occupational task.	100.00%	4
14	Enabling objectives are written for each task performance objective.	100.00%	3
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	100.00%	3
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	100.00%	4
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	00.00%	0
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	00.00%	0
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	00.00%	0
20	The student is informed of the required competencies and/or tasks prior to instruction.	00.00%	0
21	Learning time is flexible.	00.00%	0
22	Learning is guided by feedback.	00.00%	0
23	Students are informed of performance measures in advance of instruction for each task.	00.00%	0

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Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	00.00%	0
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	00.00%	0
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	00.00%	0
27	Students are required to perform each task in a joblike setting.	00.00%	0
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	00.00%	0
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	00.00%	0
30	The instructor is a manager and facilitator of learning.	00.00%	0
31	The delivery of instruction is appropriate for the different learning styles of students.	00.00%	0
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	00.00%	0
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	00.00%	0
34	Task and competency progress records are maintained for each student.	00.00%	0

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Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	00.00%	0
36	Student progress is determined by criterion-referenced measurement.	00.00%	0
37	Competency Profiles are kept current for each student.	00.00%	0
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	00.00%	0
39	A copy of the students' competency profile is included in the students' permanent records.	00.00%	0
40	Students exiting a program are provided with a copy of their competency profile.	00.00%	0
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	00.00%	0
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	00.00%	0
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	00.00%	0
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	00.00%	0
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	00.00%	0
46	The competency exams are totally performance measured.	00.00%	0

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Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	00.00%	0
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	00.00%	0
49	Criteria for passing performance tests are acceptable for on-the-job performance.	00.00%	0
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	00.00%	0
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	00.00%	0
52	The same criteria stated in the instructional objective are used in the performance test (exam).	00.00%	0

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TABLE 20

Implementation of Competency-Based Instruction as Perceived by Instructors in the English Language and Literature/Letters Area of Postsecondary Occupational Education Programs

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	100.00%	3
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	100.00%	3
3	The occupational competencies are sequenced for instructional purposes.	00.00%	0
4	The occupational competencies are clustered for course development.	00.00%	0
5	Occupational program courses are named and described.	00.00%	0
6	The prerequisite courses are identified and listed.	00.00%	0
7	The support courses are identified and listed.	00.00%	0
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	00.00%	0
9	Legitimate or validated career ladder exit points are identified in the curriculum.	00.00%	0
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	00.00%	0
11	Occupational competency profiles are developed for the occupational curriculum (program).	00.00%	0

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	00.00%	0
13	Objectives are written in performance terms for each occupational task.	00.00%	0
14	Enabling objectives are written for each task performance objective.	00.00%	0
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	00.00%	0
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	00.00%	0
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	00.00%	0
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	00.00%	0
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	00.00%	0
20	The student is informed of the required competencies and/or tasks prior to instruction.	00.00%	0
21	Learning time is flexible.	00.00%	0
22	Learning is guided by feedback.	00.00%	0
23	Students are informed of performance measures in advance of instruction for each task.	00.00%	0

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	00.00%	0
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	00.00%	0
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	00.00%	0
27	Students are required to perform each task in a joblike setting.	00.00%	0
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	00.00%	0
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	00.00%	0
30	The instructor is a manager and facilitator of learning.	00.00%	0
31	The delivery of instruction is appropriate for the different learning styles of students.	00.00%	0
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	00.00%	0
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	00.00%	0
34	Task and competency progress records are maintained for each student.	00.00%	0

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	00.00%	0
36	Student progress is determined by criterion-referenced measurement.	00.00%	0
37	Competency Profiles are kept current for each student.	00.00%	0
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	00.00%	0
39	A copy of the students' competency profile is included in the students' permanent records.	00.00%	0
40	Students exiting a program are provided with a copy of their competency profile.	00.00%	0
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	00.00%	0
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	00.00%	0
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	00.00%	0
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	00.00%	0
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	00.00%	0
46	The competency exams are totally performance measured.	00.00%	0

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	00.00%	0
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	00.00%	0
49	Criteria for passing performance tests are acceptable for on-the-job performance.	00.00%	0
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	00.00%	0
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	00.00%	0
52	The same criteria stated in the instructional objective are used in the performance test (exam).	00.00%	0

TABLE 21

Implementation of Competency-Based Instruction as Perceived by Instructors in the Science Technology Area of Postsecondary Occupational Education Programs

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	100.00%	4
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	100.00%	3
3	The occupational competencies are sequenced for instructional purposes.	100.00%	4
4	The occupational competencies are clustered for course development.	100.00%	3
5	Occupational program courses are named and described.	100.00%	4
6	The prerequisite courses are identified and listed.	100.00%	5
7	The support courses are identified and listed.	100.00%	3
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	100.00%	4
9	Legitimate or validated career ladder exit points are identified in the curriculum.	100.00%	5
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	100.00%	5
11	Occupational competency profiles are developed for the occupational curriculum (program).	100.00%	2

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	100.00%	2
13	Objectives are written in performance terms for each occupational task.	100.00%	2
14	Enabling objectives are written for each task performance objective.	100.00%	1
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	100.00%	5
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	100.00%	5
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	100.00%	3
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	100.00%	4
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	100.00%	4
20	The student is informed of the required competencies and/or tasks prior to instruction.	100.00%	5
21	Learning time is flexible.	100.00%	3
22	Learning is guided by feedback.	100.00%	4
23	Students are informed of performance measures in advance of instruction for each task.	100.00%	4

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	100.00%	4
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	100.00%	4
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	100.00%	4
27	Students are required to perform each task in a joblike setting.	100.00%	2
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	100.00%	2
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	100.00%	4
30	The instructor is a manager and facilitator of learning.	100.00%	4
31	The delivery of instruction is appropriate for the different learning styles of students.	100.00%	4
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	100.00%	5
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	100.00%	4
34	Task and competency progress records are maintained for each student.	100.00%	4

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	100.00%	3
36	Student progress is determined by criterion-referenced measurement.	100.00%	3
37	Competency Profiles are kept current for each student.	100.00%	4
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	100.00%	2
39	A copy of the students' competency profile is included in the students' permanent records.	100.00%	4
40	Students exiting a program are provided with a copy of their competency profile.	100.00%	4
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	100.00%	3
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	100.00%	5
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	100.00%	5
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	100.00%	3
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	100.00%	4
46	The competency exams are totally performance measured.	100.00%	2

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	100.00%	3
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	00.00%	0
49	Criteria for passing performance tests are acceptable for on-the-job performance.	100.00%	1
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	100.00%	3
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	00.00%	0
52	The same criteria stated in the instructional objective are used in the performance test (exam).	100.00%	4

TABLE 22

Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Law and Legal Studies Area of Postsecondary Occupational Education Programs

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	87.50%	3
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	87.50%	3
3	The occupational competencies are sequenced for instructional purposes.	100.00%	3
4	The occupational competencies are clustered for course development.	100.00%	3
5	Occupational program courses are named and described.	100.00%	4
6	The prerequisite courses are identified and listed.	100.00%	4
7	The support courses are identified and listed.	87.50%	4
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	87.50%	3
9	Legitimate or validated career ladder exit points are identified in the curriculum.	50.00%	4
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	100.00%	4
11	Occupational competency profiles are developed for the occupational curriculum (program).	62.50%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	87.50%	3
13	Objectives are written in performance terms for each occupational task.	87.50%	4
14	Enabling objectives are written for each task performance objective.	50.00%	3
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	100.00%	3
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	87.50%	4
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	62.50%	4
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	50.00%	4
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	75.00%	3
20	The student is informed of the required competencies and/or tasks prior to instruction.	87.50%	3
21	Learning time is flexible.	50.00%	3
22	Learning is guided by feedback.	100.00%	3
23	Students are informed of performance measures in advance of instruction for each task.	62.50%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	62.50%	3
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	25.00%	4
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	25.00%	3
27	Students are required to perform each task in a joblike setting.	37.50%	3
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	50.00%	3
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	75.00%	3
30	The instructor is a manager and facilitator of learning.	87.50%	3
31	The delivery of instruction is appropriate for the different learning styles of students.	100.00%	3
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	62.50%	3
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	50.00%	3
34	Task and competency progress records are maintained for each student.	62.50%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	87.50%	4
36	Student progress is determined by criterion-referenced measurement.	62.50%	4
37	Competency Profiles are kept current for each student.	37.50%	3
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	50.00%	3
39	A copy of the students' competency profile is included in the students' permanent records.	12.50%	3
40	Students exiting a program are provided with a copy of their competency profile.	12.50%	3
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	25.00%	3
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	37.50%	4
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	12.50%	4
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	75.00%	4
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	50.00%	4
46	The competency exams are totally performance measured.	50.00%	3

	Characteristics:	Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	75.00%	3
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	12.50%	2
49	Criteria for passing performance tests are acceptable for on-the-job performance.	50.00%	2
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	37.50%	3
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	25.00%	4
52	The same criteria stated in the instructional objective are used in the performance test (exam).	75.00%	3

TABLE 23

Implementation of Competency-Based Instruction as Perceived by Instructors in the Law and Legal Studies Area of Postsecondary Occupational Education Programs

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	100.00%	4
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	66.67%	3
3	The occupational competencies are sequenced for instructional purposes.	100.00%	3
4	The occupational competencies are clustered for course development.	100.00%	3
5	Occupational program courses are named and described.	66.67%	5
6	The prerequisite courses are identified and listed.	100.00%	5
7	The support courses are identified and listed.	100.00%	3
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	100.00%	3
9	Legitimate or validated career ladder exit points are identified in the curriculum.	66.67%	3
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	100.00%	4
11	Occupational competency profiles are developed for the occupational curriculum (program).	66.67%	2

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	100.00%	2
13	Objectives are written in performance terms for each occupational task.	100.00%	3
14	Enabling objectives are written for each task performance objective.	33.33%	3
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	100.00%	4
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	100.00%	4
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	33.33%	4
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	33.33%	2
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	100.00%	4
20	The student is informed of the required competencies and/or tasks prior to instruction.	100.00%	4
21	Learning time is flexible.	00.00%	0
22	Learning is guided by feedback.	00.00%	0
23	Students are informed of performance measures in advance of instruction for each task.	00.00%	0

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	00.00%	0
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	00.00%	0
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	00.00%	0
27	Students are required to perform each task in a joblike setting.	00.00%	0
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	00.00%	0
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	00.00%	0
30	The instructor is a manager and facilitator of learning.	00.00%	0
31	The delivery of instruction is appropriate for the different learning styles of students.	00.00%	0
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	00.00%	0
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	00.00%	0
34	Task and competency progress records are maintained for each student.	00.00%	0

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	00.00%	0
36	Student progress is determined by criterion-referenced measurement.	00.00%	0
37	Competency Profiles are kept current for each student.	00.00%	0
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	00.00%	0
39	A copy of the students' competency profile is included in the students' permanent records.	00.00%	0
40	Students exiting a program are provided with a copy of their competency profile.	00.00%	0
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	00.00%	0
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	00.00%	0
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	00.00%	0
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	00.00%	0
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	00.00%	0
46	The competency exams are totally performance measured.	00.00%	0

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	00.00%	0
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	00.00%	0
49	Criteria for passing performance tests are acceptable for on-the-job performance.	00.00%	0
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	00.00%	0
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	00.00%	0
52	The same criteria stated in the instructional objective are used in the performance test (exam).	00.00%	0

TABLE 24

Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Parks, Recreation, Leisure and Fitness Studies Area of Postsecondary Occupational Education Programs

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	100.00%	4
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	100.00%	4
3	The occupational competencies are sequenced for instructional purposes.	100.00%	2
4	The occupational competencies are clustered for course development.	100.00%	3
5	Occupational program courses are named and described.	100.00%	4
6	The prerequisite courses are identified and listed.	00.00%	0
7	The support courses are identified and listed.	00.00%	0
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	00.00%	0
9	Legitimate or validated career ladder exit points are identified in the curriculum.	00.00%	0
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	00.00%	0
11	Occupational competency profiles are developed for the occupational curriculum (program).	00.00%	0

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	00.00%	0
13	Objectives are written in performance terms for each occupational task.	00.00%	0
14	Enabling objectives are written for each task performance objective.	00.00%	0
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	00.00%	0
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	00.00%	0
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	00.00%	0
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	00.00%	0
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	00.00%	0
20	The student is informed of the required competencies and/or tasks prior to instruction.	00.00%	0
21	Learning time is flexible.	00.00%	0
22	Learning is guided by feedback.	00.00%	0
23	Students are informed of performance measures in advance of instruction for each task.	00.00%	0

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	00.00%	0
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	00.00%	0
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	00.00%	0
27	Students are required to perform each task in a joblike setting.	00.00%	0
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	00.00%	0
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	00.00%	0
30	The instructor is a manager and facilitator of learning.	00.00%	0
31	The delivery of instruction is appropriate for the different learning styles of students.	00.00%	0
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	00.00%	0
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	00.00%	0
34	Task and competency progress records are maintained for each student.	00.00%	0

	Characteristics:	Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	00.00%	0
36	Student progress is determined by criterion-referenced measurement.	00.00%	0
37	Competency Profiles are kept current for each student.	00.00%	0
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	00.00%	0
39	A copy of the students' competency profile is included in the students' permanent records.	00.00%	0
40	Students exiting a program are provided with a copy of their competency profile.	00.00%	0
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	00.00%	0
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	00.00%	0
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	00.00%	0
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	00.00%	0
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	00.00%	0
46	The competency exams are totally performance measured.	00.00%	0

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	00.00%	0
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	00.00%	0
49	Criteria for passing performance tests are acceptable for on-the-job performance.	00.00%	0
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	00.00%	0
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	00.00%	0
52	The same criteria stated in the instructional objective are used in the performance test (exam).	00.00%	0

TABLE 25

Implementation of Competency-Based Instruction as Perceived by Instructors in the Parks, Recreation, Leisure and fitness Studies Area of Postsecondary Occupational Education Programs

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	100.00%	3
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	100.00%	3
3	The occupational competencies are sequenced for instructional purposes.	50.00%	5
4	The occupational competencies are clustered for course development.	50.00%	5
5	Occupational program courses are named and described.	100.00%	5
6	The prerequisite courses are identified and listed.	100.00%	4
7	The support courses are identified and listed.	100.00%	4
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	50.00%	5
9	Legitimate or validated career ladder exit points are identified in the curriculum.	0.00%	0
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	00.00%	0
11	Occupational competency profiles are developed for the occupational curriculum (program).	00.00%	0

	Characteristics:	Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	00.00%	0
13	Objectives are written in performance terms for each occupational task.	00.00%	0
14	Enabling objectives are written for each task performance objective.	00.00%	0
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	00.00%	0
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	00.00%	0
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	00.00%	0
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	00.00%	0
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	00.00%	0
20	The student is informed of the required competencies and/or tasks prior to instruction.	00.00%	0
21	Learning time is flexible.	00.00%	0
22	Learning is guided by feedback.	00.00%	0
23	Students are informed of performance measures in advance of instruction for each task.	00.00%	0

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	00.00%	0
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	00.00%	0
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	00.00%	0
27	Students are required to perform each task in a joblike setting.	00.00%	0
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	00.00%	0
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	00.00%	0
30	The instructor is a manager and facilitator of learning.	00.00%	0
31	The delivery of instruction is appropriate for the different learning styles of students.	00.00%	0
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	00.00%	0
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	00.00%	0
34	Task and competency progress records are maintained for each student.	00.00%	0

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	00.00%	0
36	Student progress is determined by criterion-referenced measurement.	00.00%	0
37	Competency Profiles are kept current for each student.	00.00%	0
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	00.00%	0
39	A copy of the students' competency profile is included in the students' permanent records.	00.00%	0
40	Students exiting a program are provided with a copy of their competency profile.	00.00%	0
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	00.00%	0
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	00.00%	0
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	00.00%	0
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	00.00%	0
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	00.00%	0
46	The competency exams are totally performance measured.	00.00%	0

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	00.00%	0
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	00.00%	0
49	Criteria for passing performance tests are acceptable for on-the-job performance.	00.00%	0
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	00.00%	0
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	00.00%	0
52	The same criteria stated in the instructional objective are used in the performance test (exam).	00.00%	0

TABLE 26

Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Protective Services Area of Postsecondary Occupational Education Programs

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	90.48%	3
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	76.19%	3
3	The occupational competencies are sequenced for instructional purposes.	85.71%	4
4	The occupational competencies are clustered for course development.	85.71%	4
5	Occupational program courses are named and described.	95.24%	4
6	The prerequisite courses are identified and listed.	85.71%	4
7	The support courses are identified and listed.	100.00%	4
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	90.48%	4
9	Legitimate or validated career ladder exit points are identified in the curriculum.	47.62%	3
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	100.00%	4
11	Occupational competency profiles are developed for the occupational curriculum (program).	76.19%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	85.71%	3
13	Objectives are written in performance terms for each occupational task.	80.95%	4
14	Enabling objectives are written for each task performance objective.	76.19%	3
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	90.48%	3
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	90.48%	3
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	85.71%	3
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	61.90%	4
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	80.95%	4
20	The student is informed of the required competencies and/or tasks prior to instruction.	90.48%	4
21	Learning time is flexible.	47.62%	3
22	Learning is guided by feedback.	100.00%	3
23	Students are informed of performance measures in advance of instruction for each task.	76.19%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	71.43%	3
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	57.14%	4
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	57.14%	3
27	Students are required to perform each task in a joblike setting.	47.62%	3
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	80.95%	3
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	85.71%	3
30	The instructor is a manager and facilitator of learning.	95.24%	4
31	The delivery of instruction is appropriate for the different learning styles of students.	95.24%	3
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	76.19%	3
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	61.90%	3
34	Task and competency progress records are maintained for each student.	71.43%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	90.48%	4
36	Student progress is determined by criterion-referenced measurement.	85.71%	3
37	Competency Profiles are kept current for each student.	57.14%	3
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	71.43%	3
39	A copy of the students' competency profile is included in the students' permanent records.	28.57%	3
40	Students exiting a program are provided with a copy of their competency profile.	23.81%	3
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	38.10%	3
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	95.24%	3
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	52.38%	3
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	71.43%	4
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	71.43%	3
46	The competency exams are totally performance measured.	33.33%	3

	Characteristics:	Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	90.48%	3
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	57.14%	3
49	Criteria for passing performance tests are acceptable for on-the-job performance.	61.90%	3
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	61.90%	3
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	61.90%	3
52	The same criteria stated in the instructional objective are used in the performance test (exam).	85.71%	4

TABLE 27

Implementation of Competency-Based Instruction as Perceived by Instructors in the Protective Services Area of Postsecondary Occupational Education Programs

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	88.24%	3
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	85.29%	3
3	The occupational competencies are sequenced for instructional purposes.	76.47%	3
4	The occupational competencies are clustered for course development.	85.29%	3
5	Occupational program courses are named and described.	100.00%	4
6	The prerequisite courses are identified and listed.	79.41%	4
7	The support courses are identified and listed.	91.18%	4
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	82.35%	4
9	Legitimate or validated career ladder exit points are identified in the curriculum.	47.06%	3
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	94.12%	4
11	Occupational competency profiles are developed for the occupational curriculum (program).	67.65%	3

	Characteristics:	Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	91.18%	3
13	Objectives are written in performance terms for each occupational task.	88.24%	4
14	Enabling objectives are written for each task performance objective.	85.29%	3
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	76.47%	3
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	91.18%	3
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	88.24%	3
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	44.12%	4
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	82.35%	3
20	The student is informed of the required competencies and/or tasks prior to instruction.	94.12%	4
21	Learning time is flexible.	47.06%	3
22	Learning is guided by feedback.	100.00%	3
23	Students are informed of performance measures in advance of instruction for each task.	70.59%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	76.47%	3
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	61.76%	4
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	55.88%	4
27	Students are required to perform each task in a joblike setting.	52.94%	3
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	64.71%	3
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	94.12%	3
30	The instructor is a manager and facilitator of learning.	97.06%	4
31	The delivery of instruction is appropriate for the different learning styles of students.	91.18%	3
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	70.59%	4
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	58.82%	4
34	Task and competency progress records are maintained for each student.	55.88%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	76.47%	3
36	Student progress is determined by criterion-referenced measurement.	61.76%	3
37	Competency Profiles are kept current for each student.	38.24%	3
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	58.82%	3
39	A copy of the students' competency profile is included in the students' permanent records.	41.18%	4
40	Students exiting a program are provided with a copy of their competency profile.	20.59%	3
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	32.35%	3
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	76.47%	4
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	32.35%	3
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	79.41%	3
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	61.76%	4
46	The competency exams are totally performance measured.	47.06%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	79.41%	3
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	52.94%	4
49	Criteria for passing performance tests are acceptable for on-the-job performance.	58.82%	4
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	64.71%	4
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	64.71%	4
52	The same criteria stated in the instructional objective are used in the performance test (exam).	82.35%	4

TABLE 28

Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Public Administration and Services Area of Postsecondary Occupational Education Programs

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	50.00%	2
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	100.00%	4
3	The occupational competencies are sequenced for instructional purposes.	100.00%	4
4	The occupational competencies are clustered for course development.	50.00%	5
5	Occupational program courses are named and described.	100.00%	4
6	The prerequisite courses are identified and listed.	100.00%	4
7	The support courses are identified and listed.	100.00%	4
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	100.00%	3
9	Legitimate or validated career ladder exit points are identified in the curriculum.	100.00%	4
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	100.00%	5
11	Occupational competency profiles are developed for the occupational curriculum (program).	50.00%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	100.00%	3
13	Objectives are written in performance terms for each occupational task.	100.00%	3
14	Enabling objectives are written for each task performance objective.	50.00%	4
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	100.00%	3
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	100.00%	4
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	100.00%	4
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	50.00%	4
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	50.00%	5
20	The student is informed of the required competencies and/or tasks prior to instruction.	100.00%	4
21	Learning time is flexible.	50.00%	3
22	Learning is guided by feedback.	100.00%	4
23	Students are informed of performance measures in advance of instruction for each task.	100.00%	4

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	100.00%	4
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	50.00%	3
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	50.00%	2
27	Students are required to perform each task in a joblike setting.	50.00%	4
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	100.00%	4
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	100.00%	4
30	The instructor is a manager and facilitator of learning.	100.00%	5
31	The delivery of instruction is appropriate for the different learning styles of students.	100.00%	4
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	100.00%	4
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	100.00%	4
34	Task and competency progress records are maintained for each student.	50.00%	5

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	50.00%	5
36	Student progress is determined by criterion-referenced measurement.	100.00%	5
37	Competency Profiles are kept current for each student.	50.00%	5
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	50.00%	1
39	A copy of the students' competency profile is included in the students' permanent records.	50.00%	4
40	Students exiting a program are provided with a copy of their competency profile.	50.00%	1
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	50.00%	3
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	100.00%	3
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	50.00%	3
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	100.00%	4
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	50.00%	3
46	The competency exams are totally performance measured.	100.00%	3

	Characteristics:	Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	100.00%	4
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	50.00%	3
49	Criteria for passing performance tests are acceptable for on-the-job performance.	100.00%	4
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	100.00%	4
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	00.00%	0
52	The same criteria stated in the instructional objective are used in the performance test (exam).	100.00%	3

TABLE 29

Implementation of Competency-Based Instruction as Perceived by Instructors in the Public Administration and Services Area of Postsecondary Occupational Education Programs

	Characteristics:	Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	100.00%	3
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	100.00%	3
3	The occupational competencies are sequenced for instructional purposes.	100.00%	5
4	The occupational competencies are clustered for course development.	100.00%	5
5	Occupational program courses are named and described.	100.00%	5
6	The prerequisite courses are identified and listed.	100.00%	5
7	The support courses are identified and listed.	100.00%	5
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	100.00%	5
9	Legitimate or validated career ladder exit points are identified in the curriculum.	100.00%	5
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	100.00%	5
11	Occupational competency profiles are developed for the occupational curriculum (program).	00.00%	0

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	100.00%	3
13	Objectives are written in performance terms for each occupational task.	00.00%	0
14	Enabling objectives are written for each task performance objective.	00.00%	0
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	100.00%	5
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	100.00%	4
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	100.00%	2
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	00.00%	0
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	100.00%	3
20	The student is informed of the required competencies and/or tasks prior to instruction.	100.00%	4
21	Learning time is flexible.	00.00%	0
22	Learning is guided by feedback.	100.00%	4
23	Students are informed of performance measures in advance of instruction for each task.	100.00%	2

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	100.00%	2
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	100.00%	5
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	00.00%	0
27	Students are required to perform each task in a joblike setting.	00.00%	0
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	100.00%	5
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	100.00%	5
30	The instructor is a manager and facilitator of learning.	100.00%	5
31	The delivery of instruction is appropriate for the different learning styles of students.	100.00%	5
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	100.00%	3
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	100.00%	3
34	Task and competency progress records are maintained for each student.	100.00%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	100.00%	3
36	Student progress is determined by criterion-referenced measurement.	100.00%	3
37	Competency Profiles are kept current for each student.	00.00%	0
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	100.00%	3
39	A copy of the students' competency profile is included in the students' permanent records.	00.00%	0
40	Students exiting a program are provided with a copy of their competency profile.	00.00%	0
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	00.00%	0
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	100.00%	5
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	00.00%	0
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	100.00%	5
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	100.00%	4
46	The competency exams are totally performance measured.	100.00%	5

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	100.00%	5
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	00.00%	0
49	Criteria for passing performance tests are acceptable for on-the-job performance.	100.00%	5
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	100.00%	5
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	00.00%	0
52	The same criteria stated in the instructional objective are used in the performance test (exam).	100.00%	5

TABLE 30

Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Construction Trades Area of Postsecondary Occupational Education Programs

	Characteristics:	Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	83.33%	3
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	91.67%	3
3	The occupational competencies are sequenced for instructional purposes.	100.00%	3
4	The occupational competencies are clustered for course development.	100.00%	3
5	Occupational program courses are named and described.	100.00%	4
6	The prerequisite courses are identified and listed.	100.00%	4
7	The support courses are identified and listed.	100.00%	4
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	100.00%	3
9	Legitimate or validated career ladder exit points are identified in the curriculum.	75.00%	4
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	91.67%	4
11	Occupational competency profiles are developed for the occupational curriculum (program).	91.67%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	100.00%	4
13	Objectives are written in performance terms for each occupational task.	100.00%	3
14	Enabling objectives are written for each task performance objective.	91.67%	3
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	100.00%	3
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	100.00%	3
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	100.00%	3
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	75.00%	4
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	100.00%	4
20	The student is informed of the required competencies and/or tasks prior to instruction.	91.67%	3
21	Learning time is flexible.	83.33%	3
22	Learning is guided by feedback.	91.67%	3
23	Students are informed of performance measures in advance of instruction for each task.	91.67%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	91.67%	3
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	91.67%	3
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	75.00%	3
27	Students are required to perform each task in a joblike setting.	83.33%	3
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	83.33%	3
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	91.67%	3
30	The instructor is a manager and facilitator of learning.	91.67%	3
31	The delivery of instruction is appropriate for the different learning styles of students.	91.67%	3
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	75.00%	3
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	75.00%	3
34	Task and competency progress records are maintained for each student.	66.67%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	58.33%	3
36	Student progress is determined by criterion-referenced measurement.	75.00%	3
37	Competency Profiles are kept current for each student.	66.67%	2
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	75.00%	3
39	A copy of the students' competency profile is included in the students' permanent records.	33.33%	3
40	Students exiting a program are provided with a copy of their competency profile.	25.00%	3
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	50.00%	3
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	83.33%	3
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	75.00%	3
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	75.00%	3
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	91.67%	3
46	The competency exams are totally performance measured.	100.00%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	66.67%	3
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	91.67%	3
49	Criteria for passing performance tests are acceptable for on-the-job performance.	58.33%	3
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	83.33%	3
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	100.00%	3
52	The same criteria stated in the instructional objective are used in the performance test (exam).	66.67%	3

TABLE 31

Implementation of Competency-Based Instruction as Perceived by Instructors in the Construction Trades Area of Postsecondary Occupational Education Programs

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	93.33%	3
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	66.67%	3
3	The occupational competencies are sequenced for instructional purposes.	100.00%	4
4	The occupational competencies are clustered for course development.	100.00%	3
5	Occupational program courses are named and described.	100.00%	4
6	The prerequisite courses are identified and listed.	100.00%	4
7	The support courses are identified and listed.	100.00%	4
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	93.33%	3
9	Legitimate or validated career ladder exit points are identified in the curriculum.	73.33%	3
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	100.00%	4
11	Occupational competency profiles are developed for the occupational curriculum (program).	93.33%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	100.00%	4
13	Objectives are written in performance terms for each occupational task.	100.00%	4
14	Enabling objectives are written for each task performance objective.	93.33%	4
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	100.00%	4
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	100.00%	4
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	93.33%	4
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	60.00%	4
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	100.00%	4
20	The student is informed of the required competencies and/or tasks prior to instruction.	100.00%	4
21	Learning time is flexible.	93.33%	3
22	Learning is guided by feedback.	86.67%	3
23	Students are informed of performance measures in advance of instruction for each task.	100.00%	4

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	100.00%	4
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	100.00%	4
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	93.33%	3
27	Students are required to perform each task in a joblike setting.	100.00%	3
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	93.33%	3
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	100.00%	4
30	The instructor is a manager and facilitator of learning.	100.00%	4
31	The delivery of instruction is appropriate for the different learning styles of students.	100.00%	3
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	80.00%	3
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	73.33%	3
34	Task and competency progress records are maintained for each student.	60.00%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	80.00%	4
36	Student progress is determined by criterion-referenced measurement.	86.67%	3
37	Competency Profiles are kept current for each student.	66.67%	3
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	86.67%	4
39	A copy of the students' competency profile is included in the students' permanent records.	20.00%	4
40	Students exiting a program are provided with a copy of their competency profile.	13.33%	2
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	73.33%	3
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	93.33%	3
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	86.67%	3
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	100.00%	4
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	86.67%	3
46	The competency exams are totally performance measured.	66.67%	4

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	93.33%	4
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	46.67%	4
49	Criteria for passing performance tests are acceptable for on-the-job performance.	93.33%	3
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	100.00%	3
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	73.33%	3
52	The same criteria stated in the instructional objective are used in the performance test (exam).	100.00%	4

TABLE 32

Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Mechanics and Repairers Area of Postsecondary Occupational Education Programs

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	100.00%	4
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	92.31%	3
3	The occupational competencies are sequenced for instructional purposes.	100.00%	4
4	The occupational competencies are clustered for course development.	96.15%	4
5	Occupational program courses are named and described.	100.00%	4
6	The prerequisite courses are identified and listed.	92.31%	4
7	The support courses are identified and listed.	88.46%	4
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	96.15%	3
9	Legitimate or validated career ladder exit points are identified in the curriculum.	80.77%	3
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	100.00%	4
11	Occupational competency profiles are developed for the occupational curriculum (program).	69.23%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	84.62%	3
13	Objectives are written in performance terms for each occupational task.	84.62%	3
14	Enabling objectives are written for each task performance objective.	76.92%	3
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	96.15%	3
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	100.00%	3
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	88.46%	3
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	53.85%	3
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	96.15%	3
20	The student is informed of the required competencies and/or tasks prior to instruction.	96.15%	3
21	Learning time is flexible.	73.08%	3
22	Learning is guided by feedback.	100.00%	4
23	Students are informed of performance measures in advance of instruction for each task.	96.15%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	96.15%	3
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	73.08%	4
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	57.69%	3
27	Students are required to perform each task in a joblike setting.	88.46%	3
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	84.62%	3
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	100.00%	3
30	The instructor is a manager and facilitator of learning.	100.00%	4
31	The delivery of instruction is appropriate for the different learning styles of students.	92.31%	3
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	80.77%	3
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	61.54%	3
34	Task and competency progress records are maintained for each student.	61.54%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	88.46%	3
36	Student progress is determined by criterion-referenced measurement.	76.92%	3
37	Competency Profiles are kept current for each student.	46.15%	3
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	84.62%	3
39	A copy of the students' competency profile is included in the students' permanent records.	26.92%	4
40	Students exiting a program are provided with a copy of their competency profile.	15.38%	4
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	46.15%	3
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	92.31%	3
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	38.46%	4
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	69.23%	3
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	84.62%	3
46	The competency exams are totally performance measured.	57.69%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	92.31%	3
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	46.15%	3
49	Criteria for passing performance tests are acceptable for on-the-job performance.	92.31%	3
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	92.31%	3
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	57.69%	3
52	The same criteria stated in the instructional objective are used in the performance test (exam).	96.15%	3

TABLE 33

Implementation of Competency-Based Instruction as Perceived by Instructors in the Mechanics and Repairers Area of Postsecondary Occupational Education Programs

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	96.97%	3
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	77.27%	3
3	The occupational competencies are sequenced for instructional purposes.	95.45%	3
4	The occupational competencies are clustered for course development.	95.45%	4
5	Occupational program courses are named and described.	100.00%	4
6	The prerequisite courses are identified and listed.	87.88%	4
7	The support courses are identified and listed.	80.30%	4
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	89.39%	3
9	Legitimate or validated career ladder exit points are identified in the curriculum.	68.18%	4
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	92.42%	4
11	Occupational competency profiles are developed for the occupational curriculum (program).	68.18%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	84.85%	3
13	Objectives are written in performance terms for each occupational task.	84.85%	3
14	Enabling objectives are written for each task performance objective.	60.61%	3
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	93.94%	3
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	98.48%	3
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	77.27%	3
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	51.52%	3
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	87.88%	4
20	The student is informed of the required competencies and/or tasks prior to instruction.	93.94%	3
21	Learning time is flexible.	74.24%	3
22	Learning is guided by feedback.	95.45%	3
23	Students are informed of performance measures in advance of instruction for each task.	90.91%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	87.88%	3
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	83.33%	3
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	68.18%	3
27	Students are required to perform each task in a joblike setting.	87.88%	3
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	71.21%	3
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	98.48%	3
30	The instructor is a manager and facilitator of learning.	98.48%	4
31	The delivery of instruction is appropriate for the different learning styles of students.	93.94%	3
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	74.24%	3
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	66.67%	3
34	Task and competency progress records are maintained for each student.	69.70%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	83.33%	3
36	Student progress is determined by criterion-referenced measurement.	72.73%	3
37	Competency Profiles are kept current for each student.	54.55%	3
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	77.27%	3
39	A copy of the students' competency profile is included in the students' permanent records.	37.88%	3
40	Students exiting a program are provided with a copy of their competency profile.	18.18%	3
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	59.09%	3
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	89.39%	4
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	54.55%	3
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	81.82%	3
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	77.27%	3
46	The competency exams are totally performance measured.	59.09%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	93.94%	3
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	42.42%	3
49	Criteria for passing performance tests are acceptable for on-the-job performance.	84.85%	3
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	75.76%	3
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	51.52%	3
52	The same criteria stated in the instructional objective are used in the performance test (exam).	72.73%	4

TABLE 34

Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Precision Production Trades Area of Postsecondary Occupational Education Programs

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	95.00%	3
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	90.00%	3
3	The occupational competencies are sequenced for instructional purposes.	95.00%	4
4	The occupational competencies are clustered for course development.	95.00%	4
5	Occupational program courses are named and described.	100.00%	4
6	The prerequisite courses are identified and listed.	100.00%	4
7	The support courses are identified and listed.	100.00%	4
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	90.00%	3
9	Legitimate or validated career ladder exit points are identified in the curriculum.	70.00%	3
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	100.00%	4
11	Occupational competency profiles are developed for the occupational curriculum (program).	60.00%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	90.00%	3
13	Objectives are written in performance terms for each occupational task.	90.00%	3
14	Enabling objectives are written for each task performance objective.	80.00%	3
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	90.00%	3
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	100.00%	3
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	90.00%	3
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	70.00%	3
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	90.00%	3
20	The student is informed of the required competencies and/or tasks prior to instruction.	95.00%	3
21	Learning time is flexible.	70.00%	3
22	Learning is guided by feedback.	95.00%	3
23	Students are informed of performance measures in advance of instruction for each task.	85.00%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	85.00%	3
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	80.00%	3
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	70.00%	3
27	Students are required to perform each task in a joblike setting.	85.00%	3
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	85.00%	3
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	100.00%	3
30	The instructor is a manager and facilitator of learning.	95.00%	3
31	The delivery of instruction is appropriate for the different learning styles of students.	100.00%	3
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	75.00%	2
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	65.00%	2
34	Task and competency progress records are maintained for each student.	80.00%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	90.00%	3
36	Student progress is determined by criterion-referenced measurement.	75.00%	3
37	Competency Profiles are kept current for each student.	60.00%	2
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	70.00%	3
39	A copy of the students' competency profile is included in the students' permanent records.	30.00%	3
40	Students exiting a program are provided with a copy of their competency profile.	20.00%	2
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	60.00%	3
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	80.00%	2
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	50.00%	2
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	75.00%	3
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	75.00%	3
46	The competency exams are totally performance measured.	55.00%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	90.00%	3
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	60.00%	3
49	Criteria for passing performance tests are acceptable for on-the-job performance.	95.00%	3
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	80.00%	3
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	75.00%	3
52	The same criteria stated in the instructional objective are used in the performance test (exam).	90.00%	3

TABLE 35

Implementation of Competency-Based Instruction as Perceived by Instructors in the Precision Production Trades Area of Postsecondary Occupational Education Programs

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	86.96%	3
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	89.13%	3
3	The occupational competencies are sequenced for instructional purposes.	89.13%	3
4	The occupational competencies are clustered for course development.	84.78%	3
5	Occupational program courses are named and described.	97.83%	4
6	The prerequisite courses are identified and listed.	95.65%	4
7	The support courses are identified and listed.	93.48%	4
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	91.30%	3
9	Legitimate or validated career ladder exit points are identified in the curriculum.	65.22%	3
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	95.65%	4
11	Occupational competency profiles are developed for the occupational curriculum (program).	69.57%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	86.96%	3
13	Objectives are written in performance terms for each occupational task.	82.61%	3
14	Enabling objectives are written for each task performance objective.	60.87%	3
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	93.48%	3
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	95.65%	3
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	76.09%	3
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	56.52%	3
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	82.61%	3
20	The student is informed of the required competencies and/or tasks prior to instruction.	91.30%	3
21	Learning time is flexible.	93.48%	3
22	Learning is guided by feedback.	97.83%	3
23	Students are informed of performance measures in advance of instruction for each task.	89.13%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	89.13%	3
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	73.91%	3
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	69.57%	3
27	Students are required to perform each task in a joblike setting.	89.13%	3
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	73.91%	3
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	91.30%	3
30	The instructor is a manager and facilitator of learning.	95.65%	4
31	The delivery of instruction is appropriate for the different learning styles of students.	95.65%	3
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	78.26%	3
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	60.87%	3
34	Task and competency progress records are maintained for each student.	63.04%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	78.26%	3
36	Student progress is determined by criterion-referenced measurement.	73.91%	3
37	Competency Profiles are kept current for each student.	47.83%	3
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	69.57%	3
39	A copy of the students' competency profile is included in the students' permanent records.	32.61%	3
40	Students exiting a program are provided with a copy of their competency profile.	21.74%	2
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	52.17%	3
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	89.13%	3
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	41.30%	3
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	80.43%	3
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	65.22%	3
46	The competency exams are totally performance measured.	63.04%	3

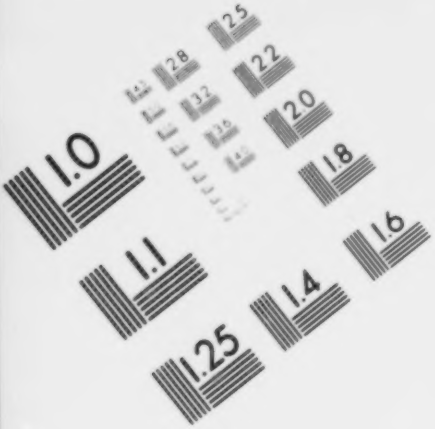
Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	86.96%	3
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	50.00%	3
49	Criteria for passing performance tests are acceptable for on-the-job performance.	78.26%	3
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	76.09%	3
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	54.35%	3
52	The same criteria stated in the instructional objective are used in the performance test (exam).	78.26%	3

TABLE 36

Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Transportation adn Materials Moving Workers Area of Postsecondary Occupational Education Programs

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	100.00%	4
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	100.00%	3
3	The occupational competencies are sequenced for instructional purposes.	100.00%	3
4	The occupational competencies are clustered for course development.	100.00%	4
5	Occupational program courses are named and described.	50.00%	5
6	The prerequisite courses are identified and listed.	100.00%	4
7	The support courses are identified and listed.	100.00%	4
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	50.00%	5
9	Legitimate or validated career ladder exit points are identified in the curriculum.	100.00%	4
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	100.00%	4
11	Occupational competency profiles are developed for the occupational curriculum (program).	100.00%	4

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	100.00%	4
13	Objectives are written in performance terms for each occupational task.	100.00%	4
14	Enabling objectives are written for each task performance objective.	100.00%	4
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	100.00%	4
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	100.00%	4
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	50.00%	2
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	100.00%	4
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	100.00%	3
20	The student is informed of the required competencies and/or tasks prior to instruction.	50.00%	2
21	Learning time is flexible.	100.00%	4
22	Learning is guided by feedback.	100.00%	3
23	Students are informed of performance measures in advance of instruction for each task.	100.00%	3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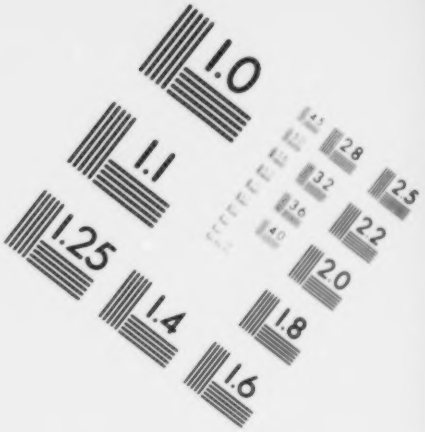
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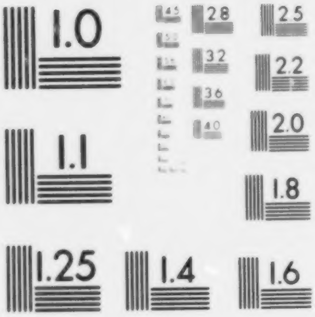
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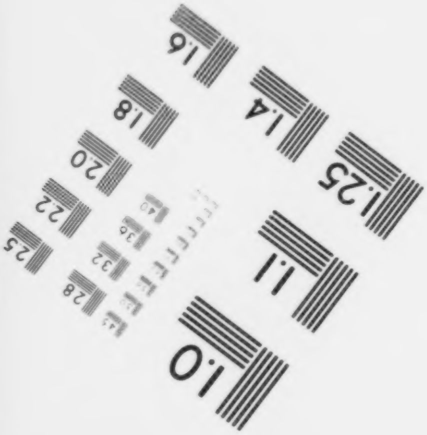
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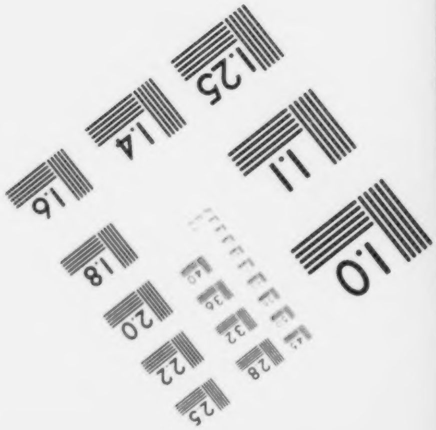
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MANUFACTURED TO AIIM STANDARDS
BY APPLIED IMAGE, INC.

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	100.00%	4
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	100.00%	3
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	100.00%	4
27	Students are required to perform each task in a joblike setting.	100.00%	3
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	100.00%	3
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	100.00%	3
30	The instructor is a manager and facilitator of learning.	100.00%	3
31	The delivery of instruction is appropriate for the different learning styles of students.	100.00%	3
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	100.00%	3
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	100.00%	4
34	Task and competency progress records are maintained for each student.	100.00%	4

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	100.00%	4
36	Student progress is determined by criterion-referenced measurement.	100.00%	4
37	Competency Profiles are kept current for each student.	100.00%	4
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	100.00%	4
39	A copy of the students' competency profile is included in the students' permanent records.	100.00%	5
40	Students exiting a program are provided with a copy of their competency profile.	50.00%	4
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	100.00%	5
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	100.00%	3
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	50.00%	4
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	100.00%	4
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	100.00%	4
46	The competency exams are totally performance measured.	100.00%	4

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	100.00%	4
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	100.00%	4
49	Criteria for passing performance tests are acceptable for on-the-job performance.	100.00%	4
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	100.00%	3
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	100.00%	4
52	The same criteria stated in the instructional objective are used in the performance test (exam).	100.00%	3

TABLE 37

Implementation of Competency-Based Instruction as Perceived by Instructors in the Transportation and Materials Moving Workers Area of Postsecondary Occupational Education Programs

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	80.00%	4
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	100.00%	4
3	The occupational competencies are sequenced for instructional purposes.	100.00%	4
4	The occupational competencies are clustered for course development.	100.00%	4
5	Occupational program courses are named and described.	100.00%	4
6	The prerequisite courses are identified and listed.	80.00%	4
7	The support courses are identified and listed.	100.00%	3
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	100.00%	3
9	Legitimate or validated career ladder exit points are identified in the curriculum.	40.00%	3
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	100.00%	3
11	Occupational competency profiles are developed for the occupational curriculum (program).	80.00%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	100.00%	4
13	Objectives are written in performance terms for each occupational task.	100.00%	3
14	Enabling objectives are written for each task performance objective.	60.00%	4
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	60.00%	3
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	100.00%	3
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	80.00%	3
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	00.00%	0
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	100.00%	3
20	The student is informed of the required competencies and/or tasks prior to instruction.	100.00%	3
21	Learning time is flexible.	20.00%	4
22	Learning is guided by feedback.	100.00%	3
23	Students are informed of performance measures in advance of instruction for each task.	100.00%	4

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	100.00%	4
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	80.00%	4
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	40.00%	3
27	Students are required to perform each task in a joblike setting.	40.00%	2
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	60.00%	3
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	100.00%	3
30	The instructor is a manager and facilitator of learning.	100.00%	4
31	The delivery of instruction is appropriate for the different learning styles of students.	100.00%	3
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	60.00%	4
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	60.00%	3
34	Task and competency progress records are maintained for each student.	40.00%	4

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	40.00%	4
36	Student progress is determined by criterion-referenced measurement.	80.00%	3
37	Competency Profiles are kept current for each student.	40.00%	4
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	40.00%	4
39	A copy of the students' competency profile is included in the students' permanent records.	60.00%	3
40	Students exiting a program are provided with a copy of their competency profile.	20.00%	5
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	20.00%	5
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	60.00%	3
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	80.00%	4
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	60.00%	4
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	80.00%	4
46	The competency exams are totally performance measured.	80.00%	4

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	80.00%	4
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	100.00%	4
49	Criteria for passing performance tests are acceptable for on-the-job performance.	60.00%	3
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	80.00%	3
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	100.00%	3
52	The same criteria stated in the instructional objective are used in the performance test (exam).	60.00%	3

TABLE 38

Implementation of Competency-Based Instruction as Perceived by Instructors in the Visual and Performance Arts Area of Postsecondary Occupational Education Programs

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	77.78%	3
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	61.11%	3
3	The occupational competencies are sequenced for instructional purposes.	77.78%	4
4	The occupational competencies are clustered for course development.	72.22%	3
5	Occupational program courses are named and described.	88.89%	4
6	The prerequisite courses are identified and listed.	94.44%	4
7	The support courses are identified and listed.	94.44%	4
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	77.78%	4
9	Legitimate or validated career ladder exit points are identified in the curriculum.	55.56%	3
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	83.33%	4
11	Occupational competency profiles are developed for the occupational curriculum (program).	50.00%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	77.78%	3
13	Objectives are written in performance terms for each occupational task.	72.22%	3
14	Enabling objectives are written for each task performance objective.	61.11%	3
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	100.00%	3
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	94.44%	4
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	50.00%	3
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	44.44%	4
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	88.89%	4
20	The student is informed of the required competencies and/or tasks prior to instruction.	77.78%	4
21	Learning time is flexible.	77.78%	3
22	Learning is guided by feedback.	94.44%	3
23	Students are informed of performance measures in advance of instruction for each task.	77.78%	4

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	77.78%	3
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	77.78%	4
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	77.78%	3
27	Students are required to perform each task in a joblike setting.	77.78%	4
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	77.78%	3
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	100.00%	3
30	The instructor is a manager and facilitator of learning.	100.00%	4
31	The delivery of instruction is appropriate for the different learning styles of students.	100.00%	3
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	77.78%	4
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	50.00%	3
34	Task and competency progress records are maintained for each student.	66.67%	3

	Characteristics:	Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	77.78%	4
36	Student progress is determined by criterion-referenced measurement.	77.78%	4
37	Competency Profiles are kept current for each student.	50.00%	3
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	72.22%	3
39	A copy of the students' competency profile is included in the students' permanent records.	16.67%	4
40	Students exiting a program are provided with a copy of their competency profile.	5.56%	4
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	44.44%	3
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	66.67%	3
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	38.89%	2
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	83.33%	4
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	83.33%	3
46	The competency exams are totally performance measured.	50.00%	4

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	88.89%	3
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	27.78%	3
49	Criteria for passing performance tests are acceptable for on-the-job performance.	61.11%	3
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	72.22%	3
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	33.33%	2
52	The same criteria stated in the instructional objective are used in the performance test (exam).	83.33%	4

TABLE 39

Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Visual and Performing Arts Area of Postsecondary Occupational Education Programs

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	87.50%	3
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	62.50%	2
3	The occupational competencies are sequenced for instructional purposes.	87.50%	3
4	The occupational competencies are clustered for course development.	62.50%	3
5	Occupational program courses are named and described.	87.50%	4
6	The prerequisite courses are identified and listed.	100.00%	4
7	The support courses are identified and listed.	87.50%	4
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	100.00%	4
9	Legitimate or validated career ladder exit points are identified in the curriculum.	25.00%	3
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	87.50%	3
11	Occupational competency profiles are developed for the occupational curriculum (program).	50.00%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	87.50%	3
13	Objectives are written in performance terms for each occupational task.	87.50%	2
14	Enabling objectives are written for each task performance objective.	50.00%	3
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	100.00%	3
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	100.00%	4
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	50.00%	3
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	62.50%	3
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	75.00%	3
20	The student is informed of the required competencies and/or tasks prior to instruction.	87.50%	3
21	Learning time is flexible.	50.00%	2
22	Learning is guided by feedback.	100.00%	3
23	Students are informed of performance measures in advance of instruction for each task.	75.00%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	62.50%	3
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	50.00%	3
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	62.50%	2
27	Students are required to perform each task in a joblike setting.	62.50%	3
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	75.00%	2
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	87.50%	3
30	The instructor is a manager and facilitator of learning.	100.00%	4
31	The delivery of instruction is appropriate for the different learning styles of students.	100.00%	3
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	50.00%	3
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	37.50%	2
34	Task and competency progress records are maintained for each student.	37.50%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	75.00%	3
36	Student progress is determined by criterion-referenced measurement.	50.00%	3
37	Competency Profiles are kept current for each student.	37.50%	4
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	75.00%	3
39	A copy of the students' competency profile is included in the students' permanent records.	25.00%	3
40	Students exiting a program are provided with a copy of their competency profile.	12.50%	5
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	25.00%	2
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	50.00%	1
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	50.00%	2
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	62.50%	3
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	75.00%	3
46	The competency exams are totally performance measured.	12.50%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	62.50%	2
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	12.50%	3
49	Criteria for passing performance tests are acceptable for on-the-job performance.	87.50%	2
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	87.50%	2
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	12.50%	2
52	The same criteria stated in the instructional objective are used in the performance test (exam).	75.00%	4

TABLE 40

Implementation of Competency-Based Instruction as Perceived by Instructors in the Health Professions and Related Services Area of Postsecondary Occupational Education Programs

	Characteristics:	Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	95.10%	4
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	79.72%	3
3	The occupational competencies are sequenced for instructional purposes.	96.50%	4
4	The occupational competencies are clustered for course development.	88.11%	4
5	Occupational program courses are named and described.	98.60%	4
6	The prerequisite courses are identified and listed.	87.41%	4
7	The support courses are identified and listed.	86.01%	4
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	96.50%	4
9	Legitimate or validated career ladder exit points are identified in the curriculum.	49.65%	4
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	98.60%	4
11	Occupational competency profiles are developed for the occupational curriculum (program).	79.72%	4

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	96.50%	4
13	Objectives are written in performance terms for each occupational task.	96.50%	4
14	Enabling objectives are written for each task performance objective.	85.31%	4
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	95.10%	4
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	97.90%	4
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	86.71%	4
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	68.53%	4
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	89.51%	4
20	The student is informed of the required competencies and/or tasks prior to instruction.	97.90%	4
21	Learning time is flexible.	74.13%	3
22	Learning is guided by feedback.	97.20%	4
23	Students are informed of performance measures in advance of instruction for each task.	97.20%	4

	Characteristics:	Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	97.20%	4
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	90.91%	4
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	76.22%	4
27	Students are required to perform each task in a joblike setting.	90.91%	4
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	93.71%	4
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	96.50%	4
30	The instructor is a manager and facilitator of learning.	97.90%	4
31	The delivery of instruction is appropriate for the different learning styles of students.	93.01%	3
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	95.10%	4
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	90.91%	4
34	Task and competency progress records are maintained for each student.	93.71%	4

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	96.50%	4
36	Student progress is determined by criterion-referenced measurement.	90.91%	4
37	Competency Profiles are kept current for each student.	75.52%	4
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	79.72%	4
39	A copy of the students' competency profile is included in the students' permanent records.	65.73%	4
40	Students exiting a program are provided with a copy of their competency profile.	24.48%	4
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	51.75%	3
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	88.81%	4
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	56.64%	4
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	81.82%	4
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	75.52%	4
46	The competency exams are totally performance measured.	66.43%	4

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	91.61%	4
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	49.65%	4
49	Criteria for passing performance tests are acceptable for on-the-job performance.	88.11%	4
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	84.62%	4
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	31.47%	4
52	The same criteria stated in the instructional objective are used in the performance test (exam).	94.41%	4

TABLE 41

Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Health Professions and Related Sciences Area of Postsecondary Occupational Education Programs

	Characteristics:	Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	88.10%	4
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	88.10%	3
3	The occupational competencies are sequenced for instructional purposes.	90.48%	4
4	The occupational competencies are clustered for course development.	88.10%	4
5	Occupational program courses are named and described.	100.00%	4
6	The prerequisite courses are identified and listed.	90.48%	4
7	The support courses are identified and listed.	85.71%	4
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	97.62%	4
9	Legitimate or validated career ladder exit points are identified in the curriculum.	54.76%	4
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	95.24%	4
11	Occupational competency profiles are developed for the occupational curriculum (program).	83.33%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	100.00%	3
13	Objectives are written in performance terms for each occupational task.	90.48%	3
14	Enabling objectives are written for each task performance objective.	76.19%	3
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	95.24%	3
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	97.62%	4
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	80.95%	3
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	69.05%	4
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	83.33%	4
20	The student is informed of the required competencies and/or tasks prior to instruction.	100.00%	4
21	Learning time is flexible.	64.29%	3
22	Learning is guided by feedback.	97.62%	3
23	Students are informed of performance measures in advance of instruction for each task.	95.24%	4

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	97.62%	3
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	88.10%	3
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	66.67%	3
27	Students are required to perform each task in a joblike setting.	85.71%	3
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	92.86%	3
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	95.24%	3
30	The instructor is a manager and facilitator of learning.	97.62%	4
31	The delivery of instruction is appropriate for the different learning styles of students.	90.48%	3
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	85.71%	4
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	76.19%	3
34	Task and competency progress records are maintained for each student.	88.10%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	92.86%	4
36	Student progress is determined by criterion-referenced measurement.	88.10%	4
37	Competency Profiles are kept current for each student.	73.81%	4
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	83.33%	3
39	A copy of the students' competency profile is included in the students' permanent records.	61.90%	4
40	Students exiting a program are provided with a copy of their competency profile.	23.81%	3
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	50.00%	3
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	92.86%	4
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	47.62%	3
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	73.81%	3
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	80.95%	3
46	The competency exams are totally performance measured.	54.76%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	88.10%	4
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	42.86%	3
49	Criteria for passing performance tests are acceptable for on-the-job performance.	83.33%	4
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	80.95%	3
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	40.48%	3
52	The same criteria stated in the instructional objective are used in the performance test (exam).	92.86%	4

TABLE 42

Implementation of Competency-Based Instruction as Perceived by Instructors in the Business Management and Administrative Services Area of Postsecondary Occupational Education Programs

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	87.65%	3
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	72.84%	3
3	The occupational competencies are sequenced for instructional purposes.	84.57%	3
4	The occupational competencies are clustered for course development.	83.33%	3
5	Occupational program courses are named and described.	92.59%	4
6	The prerequisite courses are identified and listed.	94.44%	4
7	The support courses are identified and listed.	85.19%	4
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	86.42%	3
9	Legitimate or validated career ladder exit points are identified in the curriculum.	53.09%	3
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	91.36%	4
11	Occupational competency profiles are developed for the occupational curriculum (program).	59.26%	3

	Characteristics:	Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	80.25%	3
13	Objectives are written in performance terms for each occupational task.	72.22%	3
14	Enabling objectives are written for each task performance objective.	48.77%	3
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	86.42%	3
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	87.65%	3
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	71.60%	3
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	47.53%	3
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	71.60%	3
20	The student is informed of the required competencies and/or tasks prior to instruction.	87.65%	3
21	Learning time is flexible.	52.47%	3
22	Learning is guided by feedback.	87.04%	3
23	Students are informed of performance measures in advance of instruction for each task.	78.40%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	77.16%	3
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	42.59%	3
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	40.74%	3
27	Students are required to perform each task in a joblike setting.	40.12%	3
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	63.58%	3
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	90.12%	3
30	The instructor is a manager and facilitator of learning.	96.30%	4
31	The delivery of instruction is appropriate for the different learning styles of students.	88.89%	3
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	50.62%	3
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	40.12%	3
34	Task and competency progress records are maintained for each student.	43.21%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	61.73%	4
36	Student progress is determined by criterion-referenced measurement.	58.64%	3
37	Competency Profiles are kept current for each student.	29.63%	3
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	66.05%	3
39	A copy of the students' competency profile is included in the students' permanent records.	16.67%	4
40	Students exiting a program are provided with a copy of their competency profile.	9.88%	3
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	28.40%	3
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	64.20%	4
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	30.25%	3
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	75.31%	3
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	70.99%	3
46	The competency exams are totally performance measured.	55.56%	3

	Characteristics:	Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	64.20%	3
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	27.78%	3
49	Criteria for passing performance tests are acceptable for on-the-job performance.	65.43%	3
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	67.90%	3
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	51.85%	3
52	The same criteria stated in the instructional objective are used in the performance test (exam).	79.01%	3

TABLE 43

Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Business Management and Adminstrative Services Area of Postsecondary Occupational Education Programs

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	100.00%	3
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	83.33%	3
3	The occupational competencies are sequenced for instructional purposes.	100.00%	3
4	The occupational competencies are clustered for course development.	90.00%	3
5	Occupational program courses are named and described.	100.00%	4
6	The prerequisite courses are identified and listed.	96.67%	4
7	The support courses are identified and listed.	86.67%	4
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	93.33%	3
9	Legitimate or validated career ladder exit points are identified in the curriculum.	66.67%	3
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	100.00%	4
11	Occupational competency profiles are developed for the occupational curriculum (program).	53.33%	3

	Characteristics:	Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	83.33%	3
13	Objectives are written in performance terms for each occupational task.	66.67%	3
14	Enabling objectives are written for each task performance objective.	50.00%	3
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	93.33%	3
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	96.67%	3
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	66.67%	3
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	56.67%	3
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	66.67%	3
20	The student is informed of the required competencies and/or tasks prior to instruction.	93.33%	3
21	Learning time is flexible.	43.33%	3
22	Learning is guided by feedback.	96.67%	3
23	Students are informed of performance measures in advance of instruction for each task.	76.67%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	86.67%	3
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	36.67%	3
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	30.00%	3
27	Students are required to perform each task in a joblike setting.	33.33%	3
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	60.00%	3
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	86.67%	3
30	The instructor is a manager and facilitator of learning.	96.67%	3
31	The delivery of instruction is appropriate for the different learning styles of students.	90.00%	3
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	63.33%	2
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	46.67%	2
34	Task and competency progress records are maintained for each student.	60.00%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	70.00%	3
36	Student progress is determined by criterion-referenced measurement.	63.33%	3
37	Competency Profiles are kept current for each student.	30.00%	2
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	70.00%	3
39	A copy of the students' competency profile is included in the students' permanent records.	13.33%	3
40	Students exiting a program are provided with a copy of their competency profile.	13.33%	2
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	20.00%	2
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	73.33%	3
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	20.00%	3
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	83.33%	3
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	63.33%	3
46	The competency exams are totally performance measured.	50.00%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	83.33%	4
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	26.67%	2
49	Criteria for passing performance tests are acceptable for on-the-job performance.	76.67%	3
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	73.33%	3
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	60.00%	3
52	The same criteria stated in the instructional objective are used in the performance test (exam).	83.33%	3

TABLE 44

Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Engineering-Related Technologies Area of Postsecondary Occupational Education Programs

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	95.24%	3
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	71.43%	3
3	The occupational competencies are sequenced for instructional purposes.	80.95%	3
4	The occupational competencies are clustered for course development.	95.24%	3
5	Occupational program courses are named and described.	95.24%	4
6	The prerequisite courses are identified and listed.	100.00%	4
7	The support courses are identified and listed.	95.24%	4
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	95.24%	4
9	Legitimate or validated career ladder exit points are identified in the curriculum.	66.67%	3
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	100.00%	4
11	Occupational competency profiles are developed for the occupational curriculum (program).	71.43%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	90.48%	3
13	Objectives are written in performance terms for each occupational task.	85.71%	3
14	Enabling objectives are written for each task performance objective.	85.71%	3
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	90.48%	3
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	100.00%	3
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	71.43%	3
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	57.14%	4
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	80.95%	3
20	The student is informed of the required competencies and/or tasks prior to instruction.	90.48%	4
21	Learning time is flexible.	76.19%	3
22	Learning is guided by feedback.	90.48%	3
23	Students are informed of performance measures in advance of instruction for each task.	85.71%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	85.71%	3
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	66.67%	3
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	57.14%	3
27	Students are required to perform each task in a joblike setting.	76.19%	3
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	66.67%	3
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	100.00%	3
30	The instructor is a manager and facilitator of learning.	95.24%	3
31	The delivery of instruction is appropriate for the different learning styles of students.	80.95%	3
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	71.43%	3
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	61.90%	3
34	Task and competency progress records are maintained for each student.	76.19%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	80.95%	3
36	Student progress is determined by criterion-referenced measurement.	76.19%	3
37	Competency Profiles are kept current for each student.	47.62%	3
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	52.38%	3
39	A copy of the students' competency profile is included in the students' permanent records.	23.81%	3
40	Students exiting a program are provided with a copy of their competency profile.	4.76%	6
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	66.67%	3
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	90.48%	3
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	47.62%	3
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	80.95%	3
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	57.14%	3
46	The competency exams are totally performance measured.	38.10%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	90.48%	3
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	47.62%	3
49	Criteria for passing performance tests are acceptable for on-the-job performance.	90.48%	3
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	76.19%	3
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	61.90%	3
52	The same criteria stated in the instructional objective are used in the performance test (exam).	95.24%	3

TABLE 45

Implementation of Competency-Based Instruction as Perceived by Instructors in the Engineering-Related Technologies Area of Postsecondary Occupational Education Programs

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	87.76%	3
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	77.55%	3
3	The occupational competencies are sequenced for instructional purposes.	89.80%	4
4	The occupational competencies are clustered for course development.	89.80%	4
5	Occupational program courses are named and described.	95.92%	4
6	The prerequisite courses are identified and listed.	100.00%	4
7	The support courses are identified and listed.	93.88%	4
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	89.80%	4
9	Legitimate or validated career ladder exit points are identified in the curriculum.	63.27%	3
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	93.88%	4
11	Occupational competency profiles are developed for the occupational curriculum (program).	61.22%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	83.67%	3
13	Objectives are written in performance terms for each occupational task.	75.51%	3
14	Enabling objectives are written for each task performance objective.	57.14%	3
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	93.88%	3
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	97.96%	3
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	73.47%	3
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	67.35%	4
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	79.59%	3
20	The student is informed of the required competencies and/or tasks prior to instruction.	89.80%	3
21	Learning time is flexible.	57.14%	3
22	Learning is guided by feedback.	91.84%	3
23	Students are informed of performance measures in advance of instruction for each task.	77.55%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	77.55%	3
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	63.27%	3
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	42.86%	3
27	Students are required to perform each task in a joblike setting.	63.27%	3
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	67.35%	3
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	93.88%	3
30	The instructor is a manager and facilitator of learning.	100.00%	4
31	The delivery of instruction is appropriate for the different learning styles of students.	93.88%	3
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	77.55%	3
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	61.22%	3
34	Task and competency progress records are maintained for each student.	71.43%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	85.71%	4
36	Student progress is determined by criterion-referenced measurement.	75.51%	3
37	Competency Profiles are kept current for each student.	42.86%	3
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	61.22%	3
39	A copy of the students' competency profile is included in the students' permanent records.	22.45%	3
40	Students exiting a program are provided with a copy of their competency profile.	16.33%	4
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	48.98%	3
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	73.47%	3
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	40.82%	3
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	77.55%	3
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	63.27%	3
46	The competency exams are totally performance measured.	57.14%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	87.76%	3
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	36.73%	3
49	Criteria for passing performance tests are acceptable for on-the-job performance.	69.39%	3
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	77.55%	3
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	48.98%	3
52	The same criteria stated in the instructional objective are used in the performance test (exam).	87.76%	3

TABLE 46

Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Home Economics Area of Postsecondary Occupational Education Programs

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	00.00%	0
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	00.00%	0
3	The occupational competencies are sequenced for instructional purposes.	00.00%	0
4	The occupational competencies are clustered for course development.	00.00%	0
5	Occupational program courses are named and described.	00.00%	0
6	The prerequisite courses are identified and listed.	00.00%	0
7	The support courses are identified and listed.	00.00%	0
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	00.00%	0
9	Legitimate or validated career ladder exit points are identified in the curriculum.	00.00%	0
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	00.00%	0
11	Occupational competency profiles are developed for the occupational curriculum (program).	00.00%	0

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	00.00%	0
13	Objectives are written in performance terms for each occupational task.	00.00%	0
14	Enabling objectives are written for each task performance objective.	00.00%	0
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	00.00%	0
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	00.00%	0
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	00.00%	0
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	00.00%	0
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	00.00%	0
20	The student is informed of the required competencies and/or tasks prior to instruction.	00.00%	0
21	Learning time is flexible.	00.00%	0
22	Learning is guided by feedback.	00.00%	0
23	Students are informed of performance measures in advance of instruction for each task.	00.00%	0

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	00.00%	0
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	00.00%	0
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	00.00%	0
27	Students are required to perform each task in a joblike setting.	00.00%	0
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	00.00%	0
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	00.00%	0
30	The instructor is a manager and facilitator of learning.	00.00%	0
31	The delivery of instruction is appropriate for the different learning styles of students.	00.00%	0
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	00.00%	0
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	00.00%	0
34	Task and competency progress records are maintained for each student.	00.00%	0

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	00.00%	0
36	Student progress is determined by criterion-referenced measurement.	00.00%	0
37	Competency Profiles are kept current for each student.	00.00%	0
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	00.00%	0
39	A copy of the students' competency profile is included in the students' permanent records.	00.00%	0
40	Students exiting a program are provided with a copy of their competency profile.	00.00%	0
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	00.00%	0
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	00.00%	0
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	00.00%	0
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	00.00%	0
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	00.00%	0
46	The competency exams are totally performance measured.	00.00%	0

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	00.00%	0
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	00.00%	0
49	Criteria for passing performance tests are acceptable for on-the-job performance.	00.00%	0
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	00.00%	0
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	00.00%	0
52	The same criteria stated in the instructional objective are used in the performance test (exam).	00.00%	0

TABLE 47

Implementation of Competency-Based Instruction as Perceived by Instructors in the Home Economics Area of Postsecondary Occupational Education Programs

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	100.00%	4
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	100.00%	4
3	The occupational competencies are sequenced for instructional purposes.	100.00%	4
4	The occupational competencies are clustered for course development.	100.00%	4
5	Occupational program courses are named and described.	100.00%	4
6	The prerequisite courses are identified and listed.	100.00%	4
7	The support courses are identified and listed.	100.00%	4
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	100.00%	4
9	Legitimate or validated career ladder exit points are identified in the curriculum.	00.00%	0
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	00.00%	0
11	Occupational competency profiles are developed for the occupational curriculum (program).	00.00%	0

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	00.00%	0
13	Objectives are written in performance terms for each occupational task.	00.00%	0
14	Enabling objectives are written for each task performance objective.	00.00%	0
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	00.00%	0
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	00.00%	0
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	00.00%	0
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	00.00%	0
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	00.00%	0
20	The student is informed of the required competencies and/or tasks prior to instruction.	00.00%	0
21	Learning time is flexible.	00.00%	0
22	Learning is guided by feedback.	00.00%	0
23	Students are informed of performance measures in advance of instruction for each task.	00.00%	0

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	00.00%	0
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	00.00%	0
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	00.00%	0
27	Students are required to perform each task in a joblike setting.	00.00%	0
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	00.00%	0
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	00.00%	0
30	The instructor is a manager and facilitator of learning.	00.00%	0
31	The delivery of instruction is appropriate for the different learning styles of students.	00.00%	0
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	00.00%	0
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	00.00%	0
34	Task and competency progress records are maintained for each student.	00.00%	0

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	00.00%	0
36	Student progress is determined by criterion-referenced measurement.	00.00%	0
37	Competency Profiles are kept current for each student.	00.00%	0
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	00.00%	0
39	A copy of the students' competency profile is included in the students' permanent records.	00.00%	0
40	Students exiting a program are provided with a copy of their competency profile.	00.00%	0
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	00.00%	0
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	00.00%	0
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	00.00%	0
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	00.00%	0
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	00.00%	0
46	The competency exams are totally performance measured.	00.00%	0

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	00.00%	0
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	00.00%	0
49	Criteria for passing performance tests are acceptable for on-the-job performance.	00.00%	0
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	00.00%	0
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	00.00%	0
52	The same criteria stated in the instructional objective are used in the performance test (exam).	00.00%	0

TABLE 48

Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Vocational Home Economics Area of Postsecondary Occupational Education Programs

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	100.00%	3
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	76.92%	3
3	The occupational competencies are sequenced for instructional purposes.	100.00%	3
4	The occupational competencies are clustered for course development.	100.00%	4
5	Occupational program courses are named and described.	100.00%	4
6	The prerequisite courses are identified and listed.	100.00%	4
7	The support courses are identified and listed.	84.62%	4
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	76.92%	4
9	Legitimate or validated career ladder exit points are identified in the curriculum.	76.92%	4
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	100.00%	4
11	Occupational competency profiles are developed for the occupational curriculum (program).	61.54%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	100.00%	4
13	Objectives are written in performance terms for each occupational task.	92.31%	4
14	Enabling objectives are written for each task performance objective.	76.92%	3
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	100.00%	3
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	100.00%	4
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	76.92%	4
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	69.23%	4
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	92.31%	4
20	The student is informed of the required competencies and/or tasks prior to instruction.	100.00%	4
21	Learning time is flexible.	76.92%	3
22	Learning is guided by feedback.	100.00%	4
23	Students are informed of performance measures in advance of instruction for each task.	76.92%	4

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	92.31%	4
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	69.23%	3
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	69.23%	3
27	Students are required to perform each task in a joblike setting.	84.62%	4
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	69.23%	4
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	84.62%	3
30	The instructor is a manager and facilitator of learning.	92.31%	4
31	The delivery of instruction is appropriate for the different learning styles of students.	92.31%	3
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	76.92%	3
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	69.23%	3
34	Task and competency progress records are maintained for each student.	76.92%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	84.62%	3
36	Student progress is determined by criterion-referenced measurement.	76.92%	3
37	Competency Profiles are kept current for each student.	53.85%	3
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	84.62%	3
39	A copy of the students' competency profile is included in the students' permanent records.	30.77%	2
40	Students exiting a program are provided with a copy of their competency profile.	30.77%	1
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	46.15%	3
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	84.62%	3
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	46.15%	3
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	84.62%	2
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	84.62%	3
46	The competency exams are totally performance measured.	53.85%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	84.62%	3
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	46.15%	3
49	Criteria for passing performance tests are acceptable for on-the-job performance.	84.62%	3
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	76.92%	4
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	61.54%	3
52	The same criteria stated in the instructional objective are used in the performance test (exam).	92.31%	4

TABLE 49

Implementation of Competency-Based Instruction as Perceived by Instructors in the Vocational Home Economics Area of Postsecondary Occupational Education Programs

	Characteristics:	Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
1	Occupational competencies are obtained from the workplace.	100.00%	3
2	Academic competencies needed to develop and/or perform the occupational competencies are obtained from the workplace.	95.00%	3
3	The occupational competencies are sequenced for instructional purposes.	100.00%	3
4	The occupational competencies are clustered for course development.	100.00%	4
5	Occupational program courses are named and described.	95.00%	4
6	The prerequisite courses are identified and listed.	100.00%	4
7	The support courses are identified and listed.	90.00%	4
8	Technical and support (including academic courses) are arranged so that sequential mastery of competencies leads to the satisfactory performance of all competencies of the workplace for the occupation(s) being prepared for by the student.	100.00%	3
9	Legitimate or validated career ladder exit points are identified in the curriculum.	65.00%	3
10	The curriculum is kept current with the requirements of the workplace by the use of a program advisory committee composed of representatives of the workplace.	100.00%	4
11	Occupational competency profiles are developed for the occupational curriculum (program).	75.00%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
12	Objectives are written in performance terms for each occupational competency.	90.00%	4
13	Objectives are written in performance terms for each occupational task.	85.00%	3
14	Enabling objectives are written for each task performance objective.	50.00%	4
15	Instructional materials, equipment, and supplies essential for performance of the competency are available for instructor and student use.	85.00%	3
16	Learning activities are designed to support the students' ability to learn and perform each competency successfully.	100.00%	4
17	All objectives of the programs (each course, each competency, and each lesson) are written in performance terms.	80.00%	4
18	Students entering the occupational program (curriculum) are routinely tested prior to entering the program for communication, computational, and current occupational skills/aptitudes.	55.00%	3
19	Instructional content of the course(s) is derived from an analysis of tasks validated in the workplace.	85.00%	3
20	The student is informed of the required competencies and/or tasks prior to instruction.	90.00%	4
21	Learning time is flexible.	65.00%	3
22	Learning is guided by feedback.	100.00%	3
23	Students are informed of performance measures in advance of instruction for each task.	80.00%	3

	Characteristics:	Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
24	Students are informed of performance measures in advance of instruction for each competency.	75.00%	3
25	Each student is required to perform each task at a specified standard before receiving credit or moving on to the next task.	50.00%	3
26	Each student is required to demonstrate mastery of competency at a standard specified by the workplace before receiving credit or moving on to the next competency.	60.00%	3
27	Students are required to perform each task in a joblike setting.	60.00%	4
28	A clear specification of student achievement is provided to the student in performance terms prior to each learning experience.	75.00%	3
29	The delivery of instruction or learning experiences provides for immediate and frequent feedback from the student.	85.00%	3
30	The instructor is a manager and facilitator of learning.	100.00%	4
31	The delivery of instruction is appropriate for the different learning styles of students.	100.00%	4
32	A record system is maintained for recording and documenting tasks and competencies which have been achieved by each student.	75.00%	3
33	The record system contains data that includes program standards and performance measures that are used in the continuous evaluation of the effectiveness of instruction in terms of student progress and competencies mastered.	50.00%	3
34	Task and competency progress records are maintained for each student.	70.00%	3

	Characteristics:	Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
35	Student progress records are current.	75.00%	3
36	Student progress is determined by criterion-referenced measurement.	70.00%	3
37	Competency Profiles are kept current for each student.	65.00%	2
38	The minimum acceptable measure occupational competency or task achievement is based on the performance level established by the workplace.	65.00%	3
39	A copy of the students' competency profile is included in the students' permanent records.	30.00%	3
40	Students exiting a program are provided with a copy of their competency profile.	30.00%	3
41	Time required for a student to master a competency is not considered in rating or grading a student if flexible learning time is available.	40.00%	3
42	Each student is graded on his or her own level of achievement based on predetermined standards and not in comparison to other students.	85.00%	3
43	Grades for competencies achieved are not lowered by competencies not achieved if flexible learning time is available.	40.00%	3
44	The grading system provides for achievement (proficiency) above the established performance (minimum) level.	75.00%	3
45	Performance levels (criterion) for each occupational competency of the program (course) are obtained from the workplace.	60.00%	3
46	The competency exams are totally performance measured.	45.00%	3

Characteristics:		Percent of Respondents Implementing this Characteristic	Degree of Implementation 1 = minimum 5 = maximum
47	Student mastery of occupational competencies are determined (assessed) on an individual basis.	75.00%	3
48	Competency exams approved by the workplace are used in determining a student's mastery of an occupational competency.	40.00%	3
49	Criteria for passing performance tests are acceptable for on-the-job performance.	65.00%	3
50	The time taken to complete performance tests is acceptable for the occupation (workplace).	60.00%	3
51	In an articulated program or a tech-prep curriculum, both secondary and postsecondary instructors have accepted the criteria or standards established by the workplace to determine mastery of each competency.	45.00%	3
52	The same criteria stated in the instructional objective are used in the performance test (exam).	85.00%	3

TABLE 50

Barriers to the Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Agricultural Business and Production Area of Postsecondary Occupational Education Programs

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	81.82%	9.09%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	54.55%	18.18%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	63.64%	9.09%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	54.55%	18.18%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	72.73%	18.18%
0- 6	Students may require greater time to master competencies in a CBI system.	63.64%	36.36%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	54.55%	36.36%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	72.73%	9.09%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	45.45%	36.36%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	36.36%	54.55%

Barriers		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	45.45%	54.55%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	45.45%	9.09%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	36.36%	27.27%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	63.64%	18.18%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	27.27%	18.18%
I- 2	Many inservice, workshops, and conferences are not competency-based.	54.55%	27.27%
I- 3	State approved teacher education programs are not competency-based.	27.27%	63.64%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	54.55%	9.09%
I- 5	Faculty have insufficient knowledge of CBI.	45.45%	27.27%
I- 6	Faculty believe CBI will make new demands on their time.	54.55%	27.27%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	45.45%	27.27%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	00.00%	36.36%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development,but lack skill.	54.55%	27.27%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	27.27%	63.64%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	00.00%	36.36%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	63.64%	27.27%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	54.55%	36.36%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	18.18%	72.73%
M- 4	Facilities are not appropriate for CBI.	18.18%	36.36%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	72.73%	9.09%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	36.36%	27.27%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	45.45%	36.36%

TABLE 51

Barriers to the Implementation of Competency-Based Instruction as Perceived by Instructors in the Agricultural Sciences Area of Postsecondary Occupational Education Programs

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	100.00%	00.00%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	00.00%	00.00%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	100.00%	00.00%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	100.00%	00.00%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	100.00%	00.00%
0- 6	Students may require greater time to master competencies in a CBI system.	100.00%	00.00%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	100.00%	00.00%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	100.00%	00.00%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	100.00%	00.00%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	100.00%	00.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	00.00%	00.00%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	100.00%	00.00%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	100.00%	00.00%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	100.00%	00.00%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	00.00%	00.00%
I- 2	Many inservice, workshops, and conferences are not competency-based.	100.00%	00.00%
I- 3	State approved teacher education programs are not competency-based.	100.00%	00.00%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	100.00%	00.00%
I- 5	Faculty have insufficient knowledge of CBI.	100.00%	00.00%
I- 6	Faculty believe CBI will make new demands on their time.	100.00%	00.00%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	100.00%	00.00%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	00.00%	00.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development,but lack skill.	100.00%	00.00%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	100.00%	00.00%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	100.00%	00.00%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	00.00%	100.00%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	00.00%	100.00%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	00.00%	100.00%
M- 4	Facilities are not appropriate for CBI.	00.00%	100.00%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	00.00%	100.00%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	00.00%	100.00%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	00.00%	100.00%

TABLE 52

Barriers to the Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Conservation and Renewable Resources Area of Postsecondary Occupational Education Programs

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	100.00%	00.00%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	100.00%	00.00%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	100.00%	00.00%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	100.00%	00.00%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	100.00%	00.00%
0- 6	Students may require greater time to master competencies in a CBI system.	100.00%	00.00%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	100.00%	00.00%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	100.00%	00.00%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	100.00%	00.00%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	100.00%	00.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	100.00%	00.00%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	100.00%	00.00%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	100.00%	00.00%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	100.00%	00.00%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	100.00%	00.00%
I- 2	Many inservice, workshops, and conferences are not competency-based.	100.00%	00.00%
I- 3	State approved teacher education programs are not competency-based.	100.00%	00.00%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	00.00%	00.00%
I- 5	Faculty have insufficient knowledge of CBI.	100.00%	00.00%
I- 6	Faculty believe CBI will make new demands on their time.	100.00%	00.00%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	00.00%	00.00%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	00.00%	00.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development,but lack skill.	100.00%	00.00%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	100.00%	00.00%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	100.00%	00.00%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	100.00%	00.00%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	100.00%	00.00%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	100.00%	00.00%
M- 4	Facilities are not appropriate for CBI.	100.00%	00.00%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	100.00%	00.00%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	100.00%	00.00%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	100.00%	00.00%

TABLE 53

Barriers to the Implementation of Competency-Based Instruction as Perceived by Instructors in the Conservation and Renewable Resources Area of Postsecondary Occupational Education Programs

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	100.00%	00.00%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	50.00%	50.00%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	50.00%	00.00%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	50.00%	50.00%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	50.00%	50.00%
0- 6	Students may require greater time to master competencies in a CBI system.	100.00%	00.00%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	00.00%	100.00%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	100.00%	00.00%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	00.00%	50.00%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	50.00%	50.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	00.00%	100.00%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	50.00%	00.00%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	00.00%	00.00%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	50.00%	00.00%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	00.00%	100.00%
I- 2	Many inservice, workshops, and conferences are not competency-based.	00.00%	50.00%
I- 3	State approved teacher education programs are not competency-based.	00.00%	100.00%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	00.00%	00.00%
I- 5	Faculty have insufficient knowledge of CBI.	50.00%	50.00%
I- 6	Faculty believe CBI will make new demands on their time.	100.00%	00.00%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	00.00%	00.00%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	00.00%	00.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development,but lack skill.	50.00%	00.00%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	00.00%	100.00%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	00.00%	50.00%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	50.00%	00.00%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	50.00%	00.00%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	50.00%	50.00%
M- 4	Facilities are not appropriate for CBI.	100.00%	00.00%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	100.00%	00.00%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	00.00%	50.00%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	00.00%	100.00%

TABLE 54

Barriers to the Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Architecture and Related Programs Area of Postsecondary Occupational Education Programs

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	100.00%	00.00%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	100.00%	00.00%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	100.00%	00.00%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	100.00%	00.00%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	100.00%	00.00%
0- 6	Students may require greater time to master competencies in a CBI system.	100.00%	00.00%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	100.00%	00.00%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	100.00%	00.00%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	00.00%	100.00%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	00.00%	100.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	00.00%	100.00%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	100.00%	00.00%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	100.00%	00.00%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	00.00%	00.00%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	100.00%	00.00%
I- 2	Many inservice, workshops, and conferences are not competency-based.	100.00%	00.00%
I- 3	State approved teacher education programs are not competency-based.	00.00%	100.00%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	100.00%	00.00%
I- 5	Faculty have insufficient knowledge of CBI.	100.00%	00.00%
I- 6	Faculty believe CBI will make new demands on their time.	100.00%	00.00%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	100.00%	00.00%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	00.00%	100.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development,but lack skill.	00.00%	100.00%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	00.00%	100.00%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	00.00%	00.00%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	00.00%	100.00%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	100.00%	00.00%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	100.00%	00.00%
M- 4	Facilities are not appropriate for CBI.	00.00%	100.00%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	00.00%	100.00%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	00.00%	00.00%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	00.00%	100.00%

Implementation of Competency-Based Instruction as Perceived by Instructors in the Architecture and Related Programs Area of Postsecondary Occupational Education Programs

There were no surveys that met the above field conditions.

Part 2

Implementation of Competency-Based Instruction as Perceived by Instructors in the Architecture and Related Programs Area of Postsecondary Occupational Education Programs.

There were no surveys that met the above field conditions.

TABLE 55

Barriers to the Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Agricultural Sciences Area of Postsecondary Occupational Education Programs

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	80.00%	10.00%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	70.00%	00.00%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	90.00%	10.00%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	90.00%	00.00%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	70.00%	30.00%
0- 6	Students may require greater time to master competencies in a CBI system.	80.00%	10.00%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	60.00%	40.00%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	90.00%	10.00%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	50.00%	50.00%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	80.00%	20.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	80.00%	20.00%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	80.00%	10.00%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	70.00%	00.00%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	70.00%	00.00%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	80.00%	10.00%
I- 2	Many inservice, workshops, and conferences are not competency-based.	80.00%	20.00%
I- 3	State approved teacher education programs are not competency-based.	40.00%	60.00%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	70.00%	30.00%
I- 5	Faculty have insufficient knowledge of CBI.	60.00%	20.00%
I- 6	Faculty believe CBI will make new demands on their time.	80.00%	10.00%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	80.00%	20.00%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	30.00%	50.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development,but lack skill.	80.00%	10.00%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	70.00%	30.00%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	20.00%	50.00%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	40.00%	40.00%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	30.00%	50.00%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	70.00%	30.00%
M- 4	Facilities are not appropriate for CBI.	60.00%	30.00%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	70.00%	20.00%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	70.00%	20.00%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	70.00%	30.00%

TABLE 56

Barriers to the Implementation of Competency-Based Instruction as Perceived by Instructors in the Marketing and Operations/Marketing and Distribution Area of Postsecondary Occupational Education Programs

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	58.33%	8.33%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	58.33%	8.33%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	58.33%	8.33%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	66.67%	16.67%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	58.33%	16.67%
0- 6	Students may require greater time to master competencies in a CBI system.	83.33%	8.33%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	41.67%	58.33%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	83.33%	00.00%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	58.33%	41.67%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	66.67%	25.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	58.33%	41.67%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	66.67%	16.67%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	58.33%	16.67%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	50.00%	25.00%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	66.67%	25.00%
I- 2	Many inservice, workshops, and conferences are not competency-based.	91.67%	8.33%
I- 3	State approved teacher education programs are not competency-based.	41.67%	50.00%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	58.33%	25.00%
I- 5	Faculty have insufficient knowledge of CBI.	83.33%	8.33%
I- 6	Faculty believe CBI will make new demands on their time.	83.33%	8.33%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	66.67%	16.67%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	25.00%	50.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development,but lack skill.	75.00%	16.67%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	66.67%	33.33%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	33.33%	50.00%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	58.33%	25.00%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	50.00%	33.33%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	41.67%	50.00%
M- 4	Facilities are not appropriate for CBI.	41.67%	25.00%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	75.00%	25.00%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	58.33%	25.00%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	58.33%	41.67%

TABLE 57

Barriers to the Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Communications Area of Postsecondary Occupational Education Programs

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	00.00%	33.33%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	00.00%	33.33%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	66.67%	00.00%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	66.67%	00.00%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	33.33%	33.33%
0- 6	Students may require greater time to master competencies in a CBI system.	66.67%	33.33%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	00.00%	100.00%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	66.67%	00.00%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	33.33%	66.67%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	33.33%	66.67%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	00.00%	100.00%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	00.00%	33.33%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	00.00%	33.33%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	66.67%	00.00%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	100.00%	00.00%
I- 2	Many inservice, workshops, and conferences are not competency-based.	33.33%	33.33%
I- 3	State approved teacher education programs are not competency-based.	00.00%	100.00%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	33.33%	66.67%
I- 5	Faculty have insufficient knowledge of CBI.	66.67%	00.00%
I- 6	Faculty believe CBI will make new demands on their time.	66.67%	00.00%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	33.33%	00.00%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	00.00%	33.33%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development,but lack skill.	33.33%	00.00%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	00.00%	100.00%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	00.00%	33.33%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	66.67%	33.33%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	66.67%	33.33%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	00.00%	100.00%
M- 4	Facilities are not appropriate for CBI.	33.33%	00.00%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	66.67%	00.00%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	33.33%	00.00%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	33.33%	66.67%

TABLE 58

Barriers to the Implementation of Competency-Based Instruction as Perceived by Instructors in the Communications Area of Postsecondary Occupational Education Programs

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	40.00%	40.00%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	40.00%	20.00%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	00.00%	20.00%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	40.00%	20.00%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	40.00%	20.00%
0- 6	Students may require greater time to master competencies in a CBI system.	80.00%	20.00%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	20.00%	80.00%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	60.00%	00.00%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	40.00%	60.00%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	40.00%	60.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	20.00%	80.00%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	60.00%	20.00%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	40.00%	60.00%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	60.00%	20.00%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	60.00%	20.00%
I- 2	Many inservice, workshops, and conferences are not competency-based.	60.00%	20.00%
I- 3	State approved teacher education programs are not competency-based.	60.00%	40.00%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	40.00%	20.00%
I- 5	Faculty have insufficient knowledge of CBI.	60.00%	00.00%
I- 6	Faculty believe CBI will make new demands on their time.	40.00%	40.00%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	20.00%	40.00%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	00.00%	40.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development,but lack skill.	40.00%	00.00%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	40.00%	60.00%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	00.00%	60.00%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	60.00%	00.00%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	60.00%	20.00%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	40.00%	40.00%
M- 4	Facilities are not appropriate for CBI.	60.00%	00.00%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	80.00%	00.00%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	20.00%	20.00%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	40.00%	20.00%

TABLE 59

Barriers to the Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Communications Technologies Area of Postsecondary Occupational Education Programs

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	66.67%	00.00%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	33.33%	66.67%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	00.00%	33.33%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	00.00%	100.00%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	33.33%	66.67%
0- 6	Students may require greater time to master competencies in a CBI system.	00.00%	100.00%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	00.00%	66.67%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	66.67%	33.33%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	33.33%	66.67%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	00.00%	66.67%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	00.00%	66.67%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	33.33%	33.33%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	66.67%	33.33%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	33.33%	66.67%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	33.33%	66.67%
I- 2	Many inservice, workshops, and conferences are not competency-based.	33.33%	33.33%
I- 3	State approved teacher education programs are not competency-based.	33.33%	33.33%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	33.33%	66.67%
I- 5	Faculty have insufficient knowledge of CBI.	00.00%	100.00%
I- 6	Faculty believe CBI will make new demands on their time.	66.67%	00.00%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	66.67%	33.33%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	33.33%	66.67%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development,but lack skill.	66.67%	33.33%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	66.67%	00.00%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	00.00%	66.67%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	33.33%	66.67%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	33.33%	66.67%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	33.33%	66.67%
M- 4	Facilities are not appropriate for CBI.	33.33%	33.33%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	00.00%	66.67%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	00.00%	66.67%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	00.00%	100.00%

TABLE 60

Barriers to the Implementation of Competency-Based Instruction as Perceived by Instructors in the Communications Technologies Area of Postsecondary Occupational Education Programs

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	100.00%	00.00%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	33.33%	33.33%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	66.67%	00.00%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	100.00%	00.00%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	66.67%	33.33%
0- 6	Students may require greater time to master competencies in a CBI system.	66.67%	00.00%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	66.67%	00.00%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	100.00%	00.00%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	33.33%	66.67%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	33.33%	66.67%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	33.33%	66.67%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	66.67%	33.33%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	100.00%	00.00%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	100.00%	00.00%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	66.67%	00.00%
I- 2	Many inservice, workshops, and conferences are not competency-based.	100.00%	00.00%
I- 3	State approved teacher education programs are not competency-based.	100.00%	00.00%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	33.33%	00.00%
I- 5	Faculty have insufficient knowledge of CBI.	66.67%	00.00%
I- 6	Faculty believe CBI will make new demands on their time.	66.67%	00.00%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	66.67%	00.00%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	66.67%	00.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development,but lack skill.	66.67%	00.00%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	66.67%	00.00%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	00.00%	66.67%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	33.33%	33.33%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	66.67%	00.00%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	33.33%	33.33%
M- 4	Facilities are not appropriate for CBI.	33.33%	33.33%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	100.00%	00.00%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	33.33%	33.33%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	33.33%	66.67%

TABLE 61

Barriers to the Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Computer and Information Area of Postsecondary Occupational Education Programs

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	74.07%	11.11%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	74.07%	3.70%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	66.67%	00.00%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	77.78%	7.41%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	44.44%	14.81%
0- 6	Students may require greater time to master competencies in a CBI system.	48.15%	22.22%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	70.37%	29.63%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	74.07%	3.70%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	44.44%	48.15%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	55.56%	33.33%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	55.56%	37.04%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	59.26%	7.41%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	44.44%	14.81%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	51.85%	14.81%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	70.37%	14.81%
I- 2	Many inservice, workshops, and conferences are not competency-based.	55.56%	18.52%
I- 3	State approved teacher education programs are not competency-based.	25.93%	59.26%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	92.59%	7.41%
I- 5	Faculty have insufficient knowledge of CBI.	77.78%	3.70%
I- 6	Faculty believe CBI will make new demands on their time.	88.89%	7.41%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	74.07%	14.81%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	40.74%	25.93%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development,but lack skill.	62.96%	14.81%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	48.15%	48.15%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	00.00%	25.93%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	44.44%	22.22%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	51.85%	33.33%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	62.96%	29.63%
M- 4	Facilities are not appropriate for CBI.	25.93%	29.63%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	77.78%	7.41%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	51.85%	18.52%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	59.26%	33.33%

TABLE 62

Barriers to the Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Personal and Miscellaneous Area of Postsecondary Occupational Education Programs

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	52.94%	00.00%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	29.41%	11.76%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	52.94%	00.00%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	23.53%	17.65%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	35.29%	11.76%
0- 6	Students may require greater time to master competencies in a CBI system.	29.41%	23.53%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	35.29%	58.82%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	41.18%	00.00%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	11.76%	76.47%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	23.53%	58.82%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	11.76%	52.94%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	23.53%	11.76%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	29.41%	17.65%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	41.18%	11.76%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	29.41%	11.76%
I- 2	Many inservice, workshops, and conferences are not competency-based.	41.18%	23.53%
I- 3	State approved teacher education programs are not competency-based.	23.53%	47.06%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	47.06%	17.65%
I- 5	Faculty have insufficient knowledge of CBI.	35.29%	11.76%
I- 6	Faculty believe CBI will make new demands on their time.	47.06%	11.76%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	23.53%	11.76%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	11.76%	23.53%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development.but lack skill.	35.29%	23.53%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	23.53%	41.18%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	5.88%	23.53%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	23.53%	23.53%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	11.76%	47.06%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	29.41%	47.06%
M- 4	Facilities are not appropriate for CBI.	29.41%	11.76%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	29.41%	17.65%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	23.53%	23.53%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	29.41%	52.94%

TABLE 63

Barriers to the Implementation of Competency-Based Instruction as Perceived by Instructors in the Personal and Miscellaneous Services Area of Postsecondary Occupational Education Programs

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	47.06%	17.65%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	23.53%	52.94%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	70.59%	5.88%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	23.53%	35.29%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	11.76%	29.41%
0- 6	Students may require greater time to master competencies in a CBI system.	35.29%	17.65%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	11.76%	82.35%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	41.18%	17.65%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	5.88%	82.35%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	17.65%	76.47%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	23.53%	70.59%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	29.41%	29.41%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	35.29%	23.53%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	35.29%	35.29%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	11.76%	52.94%
I- 2	Many inservice, workshops, and conferences are not competency-based.	35.29%	47.06%
I- 3	State approved teacher education programs are not competency-based.	11.76%	82.35%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	35.29%	35.29%
I- 5	Faculty have insufficient knowledge of CBI.	70.59%	5.88%
I- 6	Faculty believe CBI will make new demands on their time.	41.18%	35.29%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	11.76%	47.06%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	5.88%	47.06%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development,but lack skill.	23.53%	41.18%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	47.06%	47.06%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	5.88%	52.94%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	17.65%	52.94%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	5.88%	76.47%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	17.65%	82.35%
M- 4	Facilities are not appropriate for CBI.	23.53%	29.41%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	47.06%	23.53%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	5.88%	47.06%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	29.41%	70.59%

TABLE 64

Barriers to the Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Education Area of Postsecondary Occupational Education Programs

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	66.67%	33.33%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	66.67%	33.33%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	33.33%	66.67%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	66.67%	33.33%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	66.67%	33.33%
0- 6	Students may require greater time to master competencies in a CBI system.	66.67%	33.33%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	66.67%	33.33%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	66.67%	00.00%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	33.33%	33.33%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	33.33%	33.33%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	33.33%	33.33%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	66.67%	00.00%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	33.33%	33.33%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	33.33%	33.33%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	66.67%	00.00%
I- 2	Many inservice, workshops, and conferences are not competency-based.	66.67%	00.00%
I- 3	State approved teacher education programs are not competency-based.	66.67%	00.00%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	66.67%	33.33%
I- 5	Faculty have insufficient knowledge of CBI.	66.67%	00.00%
I- 6	Faculty believe CBI will make new demands on their time.	100.00%	00.00%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	33.33%	33.33%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	33.33%	33.33%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development.but lack skill.	66.67%	33.33%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	100.00%	00.00%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	00.00%	33.33%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	66.67%	00.00%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	66.67%	00.00%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	66.67%	00.00%
M- 4	Facilities are not appropriate for CBI.	33.33%	33.33%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	66.67%	00.00%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	66.67%	00.00%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	66.67%	00.00%

Implementation of Competency-Based Instruction as Perceived by Instructors in the Education Area of Postsecondary Occupational Education Programs

There were no surveys that met the above field conditions.

Part 2

Implementation of Competency-Based Instruction as Perceived by Instructors in the Education Area of Postsecondary Occupational Education Programs.

There were no surveys that met the above field conditions.

TABLE 65

Barriers to the Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Technology Education/Industrial Arts Area of Postsecondary Occupational Education Programs

	Barriers:	Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	00.00%	00.00%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	00.00%	00.00%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	00.00%	00.00%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	100.00%	00.00%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	00.00%	00.00%
0- 6	Students may require greater time to master competencies in a CBI system.	00.00%	00.00%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	100.00%	00.00%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	100.00%	00.00%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	00.00%	00.00%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	00.00%	00.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	00.00%	00.00%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	100.00%	00.00%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	100.00%	00.00%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	00.00%	00.00%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	100.00%	00.00%
I- 2	Many inservice, workshops, and conferences are not competency-based.	100.00%	00.00%
I- 3	State approved teacher education programs are not competency-based.	100.00%	00.00%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	100.00%	00.00%
I- 5	Faculty have insufficient knowledge of CBI.	100.00%	00.00%
I- 6	Faculty believe CBI will make new demands on their time.	100.00%	00.00%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	100.00%	00.00%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	100.00%	00.00%

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Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development,but lack skill.	100.00%	00.00%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	100.00%	00.00%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	100.00%	00.00%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	100.00%	00.00%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	100.00%	00.00%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	100.00%	00.00%
M- 4	Facilities are not appropriate for CBI.	00.00%	00.00%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	00.00%	00.00%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	00.00%	00.00%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	100.00%	00.00%

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TABLE 66

Barriers to the Implementation of Competency-Based Instruction as Perceived by Instructors in the English Language and Literature/Letters Area of Postsecondary Occupational Education Programs

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	00.00%	100.00%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	00.00%	100.00%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	00.00%	00.00%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	00.00%	00.00%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	00.00%	100.00%
0- 6	Students may require greater time to master competencies in a CBI system.	00.00%	100.00%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	00.00%	100.00%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	100.00%	00.00%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	00.00%	100.00%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	00.00%	100.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	00.00%	100.00%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	00.00%	100.00%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	100.00%	00.00%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	00.00%	00.00%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	00.00%	100.00%
I- 2	Many inservice, workshops, and conferences are not competency-based.	100.00%	00.00%
I- 3	State approved teacher education programs are not competency-based.	00.00%	100.00%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	100.00%	00.00%
I- 5	Faculty have insufficient knowledge of CBI.	100.00%	00.00%
I- 6	Faculty believe CBI will make new demands on their time.	00.00%	100.00%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	00.00%	00.00%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	00.00%	100.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development,but lack skill.	00.00%	100.00%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	00.00%	00.00%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	00.00%	00.00%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	00.00%	100.00%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	00.00%	100.00%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	00.00%	100.00%
M- 4	Facilities are not appropriate for CBI.	00.00%	100.00%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	00.00%	00.00%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	00.00%	00.00%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	00.00%	100.00%

TABLE 67

Barriers to the Implementation of Competency-Based Instruction as Perceived by Instructors in the Science Technology Area of Postsecondary Occupational Education Programs

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	100.00%	00.00%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	00.00%	00.00%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	100.00%	00.00%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	100.00%	00.00%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	100.00%	00.00%
0- 6	Students may require greater time to master competencies in a CBI system.	100.00%	00.00%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	100.00%	00.00%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	100.00%	00.00%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	00.00%	100.00%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	00.00%	100.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	00.00%	100.00%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	00.00%	00.00%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	00.00%	00.00%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	100.00%	00.00%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	00.00%	00.00%
I- 2	Many inservice, workshops, and conferences are not competency-based.	00.00%	00.00%
I- 3	State approved teacher education programs are not competency-based.	00.00%	00.00%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	00.00%	100.00%
I- 5	Faculty have insufficient knowledge of CBI.	00.00%	00.00%
I- 6	Faculty believe CBI will make new demands on their time.	00.00%	100.00%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	00.00%	00.00%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	00.00%	00.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development.but lack skill.	00.00%	00.00%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	00.00%	00.00%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	00.00%	00.00%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	00.00%	00.00%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	00.00%	00.00%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	00.00%	00.00%
M- 4	Facilities are not appropriate for CBI.	100.00%	00.00%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	100.00%	00.00%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	100.00%	00.00%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	00.00%	100.00%

TABLE 68

Barriers to the Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Law and Legal Studies Area of Postsecondary Occupational Education Programs

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	50.00%	00.00%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	37.50%	12.50%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	37.50%	12.50%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	62.50%	12.50%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	25.00%	37.50%
0- 6	Students may require greater time to master competencies in a CBI system.	50.00%	12.50%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	37.50%	62.50%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	62.50%	00.00%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	37.50%	62.50%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	50.00%	50.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	37.50%	50.00%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	37.50%	12.50%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	25.00%	12.50%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	50.00%	25.00%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	75.00%	00.00%
I- 2	Many inservice, workshops, and conferences are not competency-based.	37.50%	25.00%
I- 3	State approved teacher education programs are not competency-based.	25.00%	37.50%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	100.00%	12.50%
I- 5	Faculty have insufficient knowledge of CBI.	75.00%	00.00%
I- 6	Faculty believe CBI will make new demands on their time.	87.50%	00.00%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	62.50%	12.50%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	25.00%	37.50%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development,but lack skill.	50.00%	12.50%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	62.50%	25.00%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	00.00%	37.50%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	50.00%	37.50%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	37.50%	50.00%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	75.00%	25.00%
M- 4	Facilities are not appropriate for CBI.	50.00%	25.00%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	75.00%	12.50%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	62.50%	25.00%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	62.50%	37.50%

TABLE 69

Barriers to the Implementation of Competency-Based Instruction as Perceived by Instructors in the Law and Legal Studies Area of Postsecondary Occupational Education Programs

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	33.33%	00.00%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	66.67%	00.00%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	66.67%	33.33%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	66.67%	33.33%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	66.67%	33.33%
0- 6	Students may require greater time to master competencies in a CBI system.	00.00%	66.67%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	33.33%	66.67%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	66.67%	33.33%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	33.33%	66.67%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	33.33%	66.67%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	33.33%	66.67%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	00.00%	66.67%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	66.67%	00.00%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	33.33%	33.33%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	66.67%	33.33%
I- 2	Many inservice, workshops, and conferences are not competency-based.	33.33%	66.67%
I- 3	State approved teacher education programs are not competency-based.	00.00%	100.00%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	33.33%	66.67%
I- 5	Faculty have insufficient knowledge of CBI.	66.67%	00.00%
I- 6	Faculty believe CBI will make new demands on their time.	66.67%	33.33%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	33.33%	66.67%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	00.00%	100.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development.but lack skill.	33.33%	33.33%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	33.33%	66.67%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	33.33%	33.33%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	33.33%	33.33%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	33.33%	66.67%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	33.33%	66.67%
M- 4	Facilities are not appropriate for CBI.	00.00%	100.00%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	66.67%	33.33%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	100.00%	00.00%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	100.00%	00.00%

TABLE 70

Barriers to the Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Parks, Recreation, Leisure and Fitness Area of Postsecondary Occupational Education Programs

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	00.00%	00.00%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	100.00%	00.00%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	00.00%	00.00%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	00.00%	00.00%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	00.00%	100.00%
0- 6	Students may require greater time to master competencies in a CBI system.	00.00%	100.00%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	00.00%	100.00%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	00.00%	00.00%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	00.00%	100.00%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	00.00%	100.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	00.00%	100.00%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	00.00%	00.00%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	00.00%	00.00%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	00.00%	100.00%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	00.00%	00.00%
I- 2	Many inservice, workshops, and conferences are not competency-based.	100.00%	00.00%
I- 3	State approved teacher education programs are not competency-based.	100.00%	00.00%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	100.00%	00.00%
I- 5	Faculty have insufficient knowledge of CBI.	100.00%	00.00%
I- 6	Faculty believe CBI will make new demands on their time.	100.00%	00.00%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	00.00%	100.00%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	00.00%	100.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development,but lack skill.	100.00%	00.00%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	100.00%	00.00%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	00.00%	00.00%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	100.00%	00.00%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	100.00%	00.00%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	100.00%	00.00%
M- 4	Facilities are not appropriate for CBI.	100.00%	00.00%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	100.00%	00.00%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	00.00%	100.00%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	00.00%	100.00%

TABLE 71

Barriers to the Implementation of Competency-Based Instruction as Perceived by Instructors in the Parks, Recreation, Leisure and Fitness Studies Area of Postsecondary Occupational Education Programs

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	50.00%	50.00%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	00.00%	100.00%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	100.00%	00.00%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	00.00%	100.00%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	50.00%	50.00%
0- 6	Students may require greater time to master competencies in a CBI system.	00.00%	50.00%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	00.00%	100.00%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	50.00%	50.00%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	00.00%	100.00%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	00.00%	100.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	00.00%	100.00%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	100.00%	00.00%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	100.00%	00.00%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	00.00%	100.00%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	00.00%	100.00%
I- 2	Many inservice, workshops, and conferences are not competency-based.	50.00%	50.00%
I- 3	State approved teacher education programs are not competency-based.	50.00%	50.00%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	50.00%	50.00%
I- 5	Faculty have insufficient knowledge of CBI.	100.00%	00.00%
I- 6	Faculty believe CBI will make new demands on their time.	50.00%	50.00%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	50.00%	50.00%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	00.00%	100.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development,but lack skill.	50.00%	50.00%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	100.00%	00.00%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	00.00%	00.00%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	00.00%	50.00%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	00.00%	100.00%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	00.00%	100.00%
M- 4	Facilities are not appropriate for CBI.	00.00%	100.00%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	100.00%	00.00%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	00.00%	100.00%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	00.00%	100.00%

TABLE 72

Barriers to the Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Protective Services Area of Postsecondary Occupational Education Programs

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	33.33%	9.52%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	38.10%	19.05%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	47.62%	14.29%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	47.62%	19.05%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	28.57%	33.33%
0- 6	Students may require greater time to master competencies in a CBI system.	47.62%	19.05%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	38.10%	57.14%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	57.14%	14.29%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	23.81%	61.90%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	28.57%	57.14%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	42.86%	38.10%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	28.57%	14.29%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	38.10%	14.29%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	52.38%	14.29%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	42.86%	19.05%
I- 2	Many inservice, workshops, and conferences are not competency-based.	47.62%	23.81%
I- 3	State approved teacher education programs are not competency-based.	33.33%	47.62%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	66.67%	19.05%
I- 5	Faculty have insufficient knowledge of CBI.	52.38%	4.76%
I- 6	Faculty believe CBI will make new demands on their time.	76.19%	9.52%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	38.10%	14.29%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	14.29%	23.81%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development,but lack skill.	38.10%	19.05%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	47.62%	42.86%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	00.00%	33.33%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	19.05%	42.86%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	33.33%	28.57%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	61.90%	19.05%
M- 4	Facilities are not appropriate for CBI.	23.81%	19.05%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	66.67%	9.52%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	47.62%	14.29%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	61.90%	38.10%

TABLE 73

Barriers to the Implementation of Competency-Based Instruction as Perceived by Instructors in the Protective Services Area of Postsecondary Occupational Education Programs

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	23.53%	32.35%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	17.65%	44.12%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	47.06%	14.71%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	38.24%	32.35%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	32.35%	29.41%
0- 6	Students may require greater time to master competencies in a CBI system.	47.06%	29.41%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	23.53%	64.71%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	50.00%	17.65%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	20.59%	67.65%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	35.29%	55.88%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	35.29%	55.88%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	32.35%	23.53%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	29.41%	23.53%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	41.18%	20.59%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	41.18%	26.47%
I- 2	Many inservice, workshops, and conferences are not competency-based.	44.12%	32.35%
I- 3	State approved teacher education programs are not competency-based.	32.35%	50.00%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	38.24%	41.18%
I- 5	Faculty have insufficient knowledge of CBI.	32.35%	32.35%
I- 6	Faculty believe CBI will make new demands on their time.	64.71%	17.65%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	41.18%	29.41%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	17.65%	32.35%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development,but lack skill.	41.18%	20.59%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	35.29%	52.94%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	14.71%	50.00%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	44.12%	35.29%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	29.41%	41.18%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	29.41%	52.94%
M- 4	Facilities are not appropriate for CBI.	35.29%	35.29%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	47.06%	26.47%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	41.18%	29.41%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	44.12%	50.00%

TABLE 74

Barriers to the Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Public Administration and Services Area of Postsecondary Occupational Education Programs

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	100.00%	00.00%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	50.00%	00.00%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	50.00%	00.00%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	50.00%	00.00%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	50.00%	00.00%
0- 6	Students may require greater time to master competencies in a CBI system.	50.00%	00.00%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	50.00%	50.00%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	50.00%	00.00%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	50.00%	50.00%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	100.00%	00.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	100.00%	00.00%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	50.00%	00.00%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	50.00%	00.00%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	00.00%	00.00%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	50.00%	00.00%
I- 2	Many inservice, workshops, and conferences are not competency-based.	50.00%	00.00%
I- 3	State approved teacher education programs are not competency-based.	00.00%	100.00%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	100.00%	00.00%
I- 5	Faculty have insufficient knowledge of CBI.	50.00%	00.00%
I- 6	Faculty believe CBI will make new demands on their time.	100.00%	00.00%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	50.00%	00.00%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	50.00%	00.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development,but lack skill.	50.00%	00.00%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	50.00%	50.00%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	50.00%	00.00%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	50.00%	00.00%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	50.00%	00.00%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	100.00%	00.00%
M- 4	Facilities are not appropriate for CBI.	00.00%	50.00%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	100.00%	00.00%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	50.00%	00.00%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	100.00%	00.00%

TABLE 75

Barriers to the Implementation of Competency-Based Instruction as Perceived by Instructors in the Public Administration and Services Area of Postsecondary Occupational Education Programs

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	100.00%	00.00%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	00.00%	00.00%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	00.00%	00.00%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	100.00%	00.00%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	00.00%	00.00%
0- 6	Students may require greater time to master competencies in a CBI system.	00.00%	00.00%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	100.00%	00.00%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	100.00%	00.00%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	00.00%	00.00%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	100.00%	00.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	100.00%	00.00%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	00.00%	00.00%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	00.00%	00.00%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	100.00%	00.00%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	100.00%	00.00%
I- 2	Many inservice, workshops, and conferences are not competency-based.	00.00%	00.00%
I- 3	State approved teacher education programs are not competency-based.	00.00%	100.00%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	100.00%	00.00%
I- 5	Faculty have insufficient knowledge of CBI.	00.00%	00.00%
I- 6	Faculty believe CBI will make new demands on their time.	100.00%	00.00%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	00.00%	00.00%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	00.00%	00.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development,but lack skill.	00.00%	00.00%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	00.00%	100.00%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	00.00%	00.00%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	00.00%	00.00%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	00.00%	00.00%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	100.00%	00.00%
M- 4	Facilities are not appropriate for CBI.	00.00%	00.00%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	100.00%	00.00%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	100.00%	00.00%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	100.00%	00.00%

TABLE 76

Barriers to the Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Construction Trades Area of Postsecondary Occupational Education Programs

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	66.67%	00.00%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	25.00%	25.00%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	58.33%	00.00%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	83.33%	00.00%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	83.33%	8.33%
0- 6	Students may require greater time to master competencies in a CBI system.	91.67%	00.00%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	66.67%	25.00%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	66.67%	00.00%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	41.67%	33.33%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	25.00%	66.67%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	50.00%	41.67%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	33.33%	16.67%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	50.00%	00.00%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	58.33%	00.00%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	50.00%	25.00%
I- 2	Many inservice, workshops, and conferences are not competency-based.	25.00%	25.00%
I- 3	State approved teacher education programs are not competency-based.	25.00%	50.00%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	41.67%	16.67%
I- 5	Faculty have insufficient knowledge of CBI.	58.33%	8.33%
I- 6	Faculty believe CBI will make new demands on their time.	83.33%	00.00%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	50.00%	8.33%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	25.00%	00.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development,but lack skill.	58.33%	00.00%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	50.00%	33.33%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	16.67%	25.00%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	50.00%	8.33%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	66.67%	8.33%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	75.00%	25.00%
M- 4	Facilities are not appropriate for CBI.	33.33%	8.33%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	83.33%	00.00%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	58.33%	00.00%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	66.67%	8.33%

TABLE 77

Barriers to the Implementation of Competency-Based Instruction as Perceived by Instructors in the Construction Trades Area of Postsecondary Occupational Education Programs

	Barriers:	Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	60.00%	13.33%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	46.67%	20.00%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	46.67%	6.67%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	60.00%	13.33%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	46.67%	6.67%
0- 6	Students may require greater time to master competencies in a CBI system.	53.33%	6.67%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	33.33%	60.00%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	66.67%	00.00%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	40.00%	46.67%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	40.00%	46.67%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	53.33%	33.33%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	26.67%	6.67%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	26.67%	33.33%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	40.00%	6.67%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	26.67%	33.33%
I- 2	Many inservice, workshops, and conferences are not competency-based.	53.33%	20.00%
I- 3	State approved teacher education programs are not competency-based.	26.67%	46.67%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	40.00%	20.00%
I- 5	Faculty have insufficient knowledge of CBI.	46.67%	00.00%
I- 6	Faculty believe CBI will make new demands on their time.	66.67%	00.00%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	46.67%	20.00%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	20.00%	20.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development,but lack skill.	60.00%	00.00%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	40.00%	26.67%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	00.00%	40.00%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	40.00%	6.67%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	53.33%	00.00%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	53.33%	20.00%
M- 4	Facilities are not appropriate for CBI.	33.33%	00.00%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	66.67%	6.67%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	40.00%	13.33%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	53.33%	40.00%

TABLE 78

Barriers to the Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Mechanics and Repairers Area of Postsecondary Occupational Education Programs

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	61.54%	11.54%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	46.15%	15.38%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	42.31%	11.54%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	53.85%	15.38%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	42.31%	15.38%
0- 6	Students may require greater time to master competencies in a CBI system.	61.54%	15.38%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	42.31%	42.31%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	76.92%	3.85%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	42.31%	38.46%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	50.00%	30.77%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	61.54%	26.92%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	50.00%	19.23%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	34.62%	23.08%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	46.15%	26.92%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	50.00%	19.23%
I- 2	Many inservice, workshops, and conferences are not competency-based.	50.00%	23.08%
I- 3	State approved teacher education programs are not competency-based.	38.46%	42.31%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	42.31%	19.23%
I- 5	Faculty have insufficient knowledge of CBI.	46.15%	7.69%
I- 6	Faculty believe CBI will make new demands on their time.	73.08%	3.85%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	57.69%	11.54%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	19.23%	26.92%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development.but lack skill.	46.15%	19.23%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	50.00%	34.62%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	19.23%	15.38%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	61.54%	11.54%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	69.23%	15.38%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	57.69%	30.77%
M- 4	Facilities are not appropriate for CBI.	34.62%	19.23%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	76.92%	7.69%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	42.31%	19.23%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	69.23%	23.08%

TABLE 79

Barriers to the Implementation of Competency-Based Instruction as Perceived by Instructors in the Mechanics and Repairers Area of Postsecondary Occupational Education Programs

	Barriers:	Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	63.64%	7.58%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	37.88%	21.21%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	45.45%	9.09%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	39.39%	18.18%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	37.88%	15.15%
0- 6	Students may require greater time to master competencies in a CBI system.	62.12%	10.61%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	43.94%	43.94%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	63.64%	1.52%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	19.70%	57.58%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	28.79%	56.06%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	42.42%	53.03%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	34.85%	22.73%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	30.30%	22.73%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	51.52%	9.09%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	42.42%	16.67%
I- 2	Many inservice, workshops, and conferences are not competency-based.	46.97%	22.73%
I- 3	State approved teacher education programs are not competency-based.	34.85%	43.94%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	43.94%	18.18%
I- 5	Faculty have insufficient knowledge of CBI.	37.88%	16.67%
I- 6	Faculty believe CBI will make new demands on their time.	68.18%	13.64%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	42.42%	19.70%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	16.67%	25.76%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development,but lack skill.	50.00%	15.15%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	43.94%	37.88%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	16.67%	18.18%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	62.12%	15.15%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	62.12%	18.18%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	53.03%	37.88%
M- 4	Facilities are not appropriate for CBI.	27.27%	15.15%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	80.30%	10.61%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	45.45%	16.67%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	59.09%	34.85%

TABLE 80

Barriers to the Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Precision Production Trades Area of Postsecondary Occupational Education Programs

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	75.00%	00.00%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	55.00%	00.00%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	45.00%	20.00%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	45.00%	30.00%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	40.00%	15.00%
0- 6	Students may require greater time to master competencies in a CBI system.	55.00%	15.00%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	65.00%	30.00%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	75.00%	15.00%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	50.00%	25.00%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	70.00%	15.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	70.00%	20.00%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	50.00%	10.00%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	45.00%	25.00%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	35.00%	30.00%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	65.00%	15.00%
I- 2	Many inservice, workshops, and conferences are not competency-based.	65.00%	10.00%
I- 3	State approved teacher education programs are not competency-based.	60.00%	30.00%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	40.00%	35.00%
I- 5	Faculty have insufficient knowledge of CBI.	75.00%	10.00%
I- 6	Faculty believe CBI will make new demands on their time.	80.00%	10.00%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	45.00%	25.00%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	20.00%	30.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development,but lack skill.	70.00%	10.00%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	65.00%	20.00%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	25.00%	25.00%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	70.00%	10.00%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	60.00%	15.00%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	75.00%	15.00%
M- 4	Facilities are not appropriate for CBI.	30.00%	15.00%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	70.00%	10.00%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	40.00%	25.00%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	70.00%	25.00%

TABLE 81

Barriers to the Implementation of Competency-Based Instruction as Perceived by Instructors in the Precision Production Trades Area of Postsecondary Occupational Education Programs

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	56.52%	6.52%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	45.65%	19.57%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	34.78%	4.35%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	45.65%	23.91%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	30.43%	21.74%
0- 6	Students may require greater time to master competencies in a CBI system.	34.78%	19.57%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	45.65%	39.13%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	58.70%	10.87%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	32.61%	52.17%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	47.83%	41.30%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	52.17%	34.78%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	43.48%	13.04%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	45.65%	19.57%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	36.96%	21.74%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	34.78%	26.09%
I- 2	Many inservice, workshops, and conferences are not competency-based.	43.48%	28.26%
I- 3	State approved teacher education programs are not competency-based.	41.30%	41.30%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	43.48%	21.74%
I- 5	Faculty have insufficient knowledge of CBI.	60.87%	8.70%
I- 6	Faculty believe CBI will make new demands on their time.	58.70%	10.87%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	36.96%	26.09%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	15.22%	32.61%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development,but lack skill.	52.17%	13.04%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	56.52%	26.09%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	15.22%	28.26%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	45.65%	17.39%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	45.65%	19.57%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	41.30%	39.13%
M- 4	Facilities are not appropriate for CBI.	19.57%	23.91%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	45.65%	28.26%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	30.43%	30.43%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	52.17%	41.30%

TABLE 82

Barriers to the Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Transportation and Materials Moving Workers Area of Postsecondary Occupational Education Programs

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	00.00%	50.00%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	00.00%	50.00%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	00.00%	00.00%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	00.00%	100.00%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	00.00%	50.00%
0- 6	Students may require greater time to master competencies in a CBI system.	50.00%	00.00%
0- 7	CBI programs with open entry/open'exit do not match institutional methods for determining funding.	50.00%	50.00%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	50.00%	00.00%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	00.00%	50.00%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	50.00%	00.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	50.00%	50.00%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	00.00%	50.00%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	00.00%	50.00%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	00.00%	50.00%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	00.00%	50.00%
I- 2	Many inservice, workshops, and conferences are not competency-based.	50.00%	00.00%
I- 3	State approved teacher education programs are not competency-based.	100.00%	00.00%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	50.00%	00.00%
I- 5	Faculty have insufficient knowledge of CBI.	50.00%	00.00%
I- 6	Faculty believe CBI will make new demands on their time.	00.00%	00.00%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	50.00%	00.00%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	50.00%	00.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development,but lack skill.	50.00%	00.00%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	100.00%	00.00%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	00.00%	50.00%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	100.00%	00.00%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	100.00%	00.00%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	00.00%	100.00%
M- 4	Facilities are not appropriate for CBI.	50.00%	00.00%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	00.00%	00.00%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	50.00%	00.00%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	50.00%	00.00%

TABLE 83

Barriers to the Implementation of Competency-Based Instruction as Perceived by Instructors in the Transportation and Materials Moving Workers Area of Postsecondary Occupational Education Programs

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	60.00%	00.00%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	80.00%	20.00%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	40.00%	00.00%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	60.00%	20.00%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	60.00%	20.00%
0- 6	Students may require greater time to master competencies in a CBI system.	60.00%	00.00%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	60.00%	40.00%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	60.00%	00.00%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	00.00%	80.00%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	20.00%	80.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	100.00%	00.00%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	60.00%	00.00%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	60.00%	40.00%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	40.00%	00.00%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	60.00%	40.00%
I- 2	Many inservice, workshops, and conferences are not competency-based.	80.00%	20.00%
I- 3	State approved teacher education programs are not competency-based.	40.00%	60.00%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	40.00%	60.00%
I- 5	Faculty have insufficient knowledge of CBI.	60.00%	20.00%
I- 6	Faculty believe CBI will make new demands on their time.	80.00%	00.00%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	40.00%	40.00%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	40.00%	40.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development,but lack skill.	80.00%	00.00%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	80.00%	20.00%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	00.00%	40.00%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	100.00%	00.00%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	80.00%	00.00%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	60.00%	20.00%
M- 4	Facilities are not appropriate for CBI.	80.00%	20.00%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	80.00%	00.00%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	40.00%	40.00%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	80.00%	20.00%

TABLE 84

Barriers to the Implementation of Competency-Based Instruction as Perceived by Instructors in the Visual and Performing Arts Area of Postsecondary Occupational Education Programs

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	50.00%	22.22%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	22.22%	33.33%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	33.33%	44.44%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	33.33%	50.00%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	38.89%	33.33%
0- 6	Students may require greater time to master competencies in a CBI system.	55.56%	22.22%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	22.22%	72.22%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	61.11%	16.67%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	22.22%	61.11%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	22.22%	61.11%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	44.44%	38.89%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	38.89%	22.22%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	55.56%	22.22%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	55.56%	22.22%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	33.33%	38.89%
I- 2	Many inservice, workshops, and conferences are not competency-based.	44.44%	38.89%
I- 3	State approved teacher education programs are not competency-based.	33.33%	50.00%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	50.00%	22.22%
I- 5	Faculty have insufficient knowledge of CBI.	61.11%	16.67%
I- 6	Faculty believe CBI will make new demands on their time.	55.56%	22.22%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	44.44%	16.67%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	11.11%	38.89%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development,but lack skill.	27.78%	38.89%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	55.56%	33.33%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	11.11%	27.78%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	50.00%	33.33%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	44.44%	27.78%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	44.44%	38.89%
M- 4	Facilities are not appropriate for CBI.	27.78%	33.33%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	55.56%	33.33%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	27.78%	44.44%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	50.00%	44.44%

TABLE 85

Barriers to the Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Visual and Performing Arts Area of Postsecondary Occupational Education Programs

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	62.50%	12.50%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	37.50%	12.50%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	50.00%	37.50%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	50.00%	37.50%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	62.50%	25.00%
0- 6	Students may require greater time to master competencies in a CBI system.	75.00%	12.50%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	50.00%	50.00%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	75.00%	00.00%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	12.50%	75.00%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	12.50%	75.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	37.50%	50.00%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	50.00%	25.00%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	62.50%	37.50%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	37.50%	37.50%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	50.00%	50.00%
I- 2	Many inservice, workshops, and conferences are not competency-based.	75.00%	25.00%
I- 3	State approved teacher education programs are not competency-based.	37.50%	62.50%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	37.50%	37.50%
I- 5	Faculty have insufficient knowledge of CBI.	50.00%	50.00%
I- 6	Faculty believe CBI will make new demands on their time.	50.00%	37.50%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	50.00%	37.50%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	25.00%	37.50%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development,but lack skill.	37.50%	37.50%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	50.00%	50.00%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	00.00%	50.00%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	37.50%	50.00%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	37.50%	50.00%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	25.00%	62.50%
M- 4	Facilities are not appropriate for CBI.	25.00%	50.00%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	62.50%	37.50%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	12.50%	75.00%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	37.50%	62.50%

TABLE 86

Barriers to the Implementation of Competency-Based Instruction as Perceived by Instructors in the Health Professions and Related Services Area of Postsecondary Occupational Education Programs

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	46.15%	11.89%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	29.37%	30.07%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	43.36%	6.29%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	39.16%	19.58%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	37.76%	16.78%
0- 6	Students may require greater time to master competencies in a CBI system.	39.16%	17.48%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	32.17%	58.74%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	51.75%	6.99%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	20.28%	60.14%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	22.38%	55.94%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	30.77%	55.94%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	36.36%	19.58%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	40.56%	20.98%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	44.76%	11.89%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	32.87%	23.08%
I- 2	Many inservice, workshops, and conferences are not competency-based.	41.26%	22.38%
I- 3	State approved teacher education programs are not competency-based.	22.38%	62.94%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	34.97%	21.68%
I- 5	Faculty have insufficient knowledge of CBI.	51.05%	11.89%
I- 6	Faculty believe CBI will make new demands on their time.	48.95%	18.88%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	25.87%	19.58%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	15.38%	30.77%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development,but lack skill.	46.15%	13.99%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	44.06%	34.97%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	6.99%	30.77%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	42.66%	22.38%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	33.57%	30.07%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	28.67%	56.64%
M- 4	Facilities are not appropriate for CBI.	16.78%	23.78%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	60.14%	11.19%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	36.36%	20.98%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	46.85%	39.86%

TABLE 87

Barriers to the Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Health Professions and Related Services Area of Postsecondary Occupational Education Programs

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	54.76%	4.76%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	47.62%	14.29%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	45.24%	4.76%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	57.14%	19.05%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	42.86%	16.67%
0- 6	Students may require greater time to master competencies in a CBI system.	40.48%	11.90%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	35.71%	59.52%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	64.29%	7.14%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	26.19%	66.67%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	40.48%	50.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	33.33%	50.00%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	42.86%	19.05%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	45.24%	23.81%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	52.38%	7.14%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	42.86%	23.81%
I- 2	Many inservice, workshops, and conferences are not competency-based.	54.76%	19.05%
I- 3	State approved teacher education programs are not competency-based.	30.95%	47.62%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	33.33%	26.19%
I- 5	Faculty have insufficient knowledge of CBI.	57.14%	14.29%
I- 6	Faculty believe CBI will make new demands on their time.	64.29%	9.52%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	33.33%	23.81%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	11.90%	35.71%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development,but lack skill.	50.00%	16.67%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	40.48%	42.86%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	7.14%	30.95%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	50.00%	26.19%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	45.24%	26.19%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	40.48%	50.00%
M- 4	Facilities are not appropriate for CBI.	16.67%	26.19%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	59.52%	7.14%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	30.95%	21.43%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	38.10%	52.38%

TABLE 88

Barriers to the Implementation of Competency-Based Instruction as Perceived by Instructors in the Business Management and Adminstrative Services Area of Postsecondary Occupational Education Programs

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	66.67%	9.26%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	48.15%	15.43%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	49.38%	12.35%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	49.38%	21.60%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	38.89%	25.93%
0- 6	Students may require greater time to master competencies in a CBI system.	56.17%	20.99%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	40.74%	51.23%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	63.58%	10.49%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	32.72%	58.02%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	39.51%	51.85%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	46.91%	46.30%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	45.06%	15.43%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	48.15%	12.96%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	50.62%	15.43%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	42.59%	26.54%
I- 2	Many inservice, workshops, and conferences are not competency-based.	50.62%	22.22%
I- 3	State approved teacher education programs are not competency-based.	30.25%	53.09%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	45.68%	25.93%
I- 5	Faculty have insufficient knowledge of CBI.	58.02%	9.88%
I- 6	Faculty believe CBI will make new demands on their time.	73.46%	11.11%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	38.27%	29.01%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	16.05%	33.33%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development,but lack skill.	40.74%	24.69%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	44.44%	41.98%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	6.79%	39.51%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	40.74%	30.86%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	33.33%	38.27%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	40.74%	46.91%
M- 4	Facilities are not appropriate for CBI.	27.78%	26.54%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	62.35%	22.84%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	33.33%	30.25%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	43.21%	50.00%

TABLE 89

Barriers to the Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Business Management and Adminstrative Services Area of Postsecondary Occupational Education Programs

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	63.33%	3.33%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	66.67%	10.00%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	70.00%	6.67%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	80.00%	6.67%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	53.33%	16.67%
0- 6	Students may require greater time to master competencies in a CBI system.	66.67%	13.33%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	46.67%	46.67%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	80.00%	3.33%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	36.67%	53.33%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	56.67%	33.33%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	63.33%	26.67%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	46.67%	13.33%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	50.00%	16.67%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	43.33%	23.33%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	63.33%	16.67%
I- 2	Many inservice, workshops, and conferences are not competency-based.	56.67%	20.00%
I- 3	State approved teacher education programs are not competency-based.	33.33%	56.67%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	70.00%	20.00%
I- 5	Faculty have insufficient knowledge of CBI.	73.33%	6.67%
I- 6	Faculty believe CBI will make new demands on their time.	83.33%	10.00%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	50.00%	20.00%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	16.67%	43.33%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development,but lack skill.	56.67%	13.33%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	50.00%	43.33%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	10.00%	36.67%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	26.67%	36.67%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	36.67%	33.33%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	50.00%	40.00%
M- 4	Facilities are not appropriate for CBI.	16.67%	36.67%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	70.00%	16.67%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	50.00%	20.00%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	53.33%	36.67%

TABLE 90

Barriers to the Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Engineering-Related Technologies Area of Postsecondary Occupational Education Programs

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	52.38%	00.00%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	42.86%	9.52%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	42.86%	14.29%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	52.38%	19.05%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	47.62%	14.29%
0- 6	Students may require greater time to master competencies in a CBI system.	52.38%	23.81%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	61.90%	28.57%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	61.90%	4.76%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	28.57%	57.14%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	42.86%	42.86%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	47.62%	38.10%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	57.14%	00.00%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	38.10%	9.52%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	28.57%	9.52%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	57.14%	9.52%
I- 2	Many inservice, workshops, and conferences are not competency-based.	71.43%	9.52%
I- 3	State approved teacher education programs are not competency-based.	47.62%	42.86%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	61.90%	00.00%
I- 5	Faculty have insufficient knowledge of CBI.	47.62%	4.76%
I- 6	Faculty believe CBI will make new demands on their time.	71.43%	4.76%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	57.14%	9.52%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	28.57%	14.29%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development.but lack skill.	61.90%	00.00%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	61.90%	14.29%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	4.76%	28.57%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	71.43%	00.00%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	61.90%	4.76%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	61.90%	23.81%
M- 4	Facilities are not appropriate for CBI.	23.81%	00.00%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	61.90%	9.52%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	42.86%	14.29%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	71.43%	14.29%

TABLE 91

Barriers to the Implementation of Competency-Based Instruction as Perceived by Instructors in the Engineering-Related Technologies Area of Postsecondary Occupational Education Programs

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	57.14%	16.33%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	36.73%	30.61%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	44.90%	24.49%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	53.06%	20.41%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	53.06%	14.29%
0- 6	Students may require greater time to master competencies in a CBI system.	59.18%	20.41%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	51.02%	34.69%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	63.27%	10.20%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	36.73%	51.02%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	36.73%	53.06%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	40.82%	44.90%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	55.10%	14.29%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	38.78%	24.49%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	48.98%	12.24%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	48.98%	16.33%
I- 2	Many inservice, workshops, and conferences are not competency-based.	63.27%	18.37%
I- 3	State approved teacher education programs are not competency-based.	40.82%	44.90%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	48.98%	20.41%
I- 5	Faculty have insufficient knowledge of CBI.	53.06%	14.29%
I- 6	Faculty believe CBI will make new demands on their time.	67.35%	10.20%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	32.65%	36.73%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	26.53%	32.65%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development,but lack skill.	44.90%	14.29%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	55.10%	28.57%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	6.12%	32.65%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	63.27%	14.29%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	48.98%	28.57%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	51.02%	38.78%
M- 4	Facilities are not appropriate for CBI.	40.82%	18.37%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	69.39%	14.29%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	34.69%	26.53%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	57.14%	34.69%

TABLE 92

Barriers to the Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Home Economics Area of Postsecondary Occupational Education Programs

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	100.00%	00.00%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	100.00%	00.00%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	100.00%	00.00%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	100.00%	00.00%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	100.00%	00.00%
0- 6	Students may require greater time to master competencies in a CBI system.	100.00%	00.00%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	100.00%	00.00%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	100.00%	00.00%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	100.00%	00.00%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	100.00%	00.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	100.00%	00.00%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	100.00%	00.00%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	100.00%	00.00%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	100.00%	00.00%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	100.00%	00.00%
I- 2	Many inservice, workshops, and conferences are not competency-based.	100.00%	00.00%
I- 3	State approved teacher education programs are not competency-based.	100.00%	00.00%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	100.00%	00.00%
I- 5	Faculty have insufficient knowledge of CBI.	100.00%	00.00%
I- 6	Faculty believe CBI will make new demands on their time.	100.00%	00.00%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	100.00%	00.00%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	100.00%	00.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development,but lack skill.	100.00%	00.00%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	100.00%	00.00%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	100.00%	00.00%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	100.00%	00.00%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	100.00%	00.00%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	100.00%	00.00%
M- 4	Facilities are not appropriate for CBI.	100.00%	00.00%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	100.00%	00.00%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	100.00%	00.00%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	100.00%	00.00%

TABLE 93

Barriers to the Implementation of Competency-Based Instruction as Perceived by Instructors in the Home Economics Area of Postsecondary Occupational Education Programs

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	100.00%	00.00%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	00.00%	00.00%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	100.00%	00.00%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	100.00%	00.00%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	100.00%	00.00%
0- 6	Students may require greater time to master competencies in a CBI system.	100.00%	00.00%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	100.00%	00.00%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	100.00%	00.00%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	100.00%	00.00%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	100.00%	00.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	100.00%	00.00%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	100.00%	00.00%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	00.00%	100.00%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	100.00%	00.00%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	100.00%	00.00%
I- 2	Many inservice, workshops, and conferences are not competency-based.	00.00%	00.00%
I- 3	State approved teacher education programs are not competency-based.	00.00%	100.00%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	100.00%	00.00%
I- 5	Faculty have insufficient knowledge of CBI.	100.00%	00.00%
I- 6	Faculty believe CBI will make new demands on their time.	100.00%	00.00%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	00.00%	00.00%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	100.00%	00.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development,but lack skill.	00.00%	00.00%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	100.00%	00.00%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	100.00%	00.00%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	100.00%	00.00%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	100.00%	00.00%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	100.00%	00.00%
M- 4	Facilities are not appropriate for CBI.	100.00%	00.00%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	100.00%	00.00%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	100.00%	00.00%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	100.00%	00.00%

TABLE 94

Barriers to the Implementation of Competency-Based Instruction as Perceived by Division/Program Chairs/Directors in the Vocational Home Economics Area of Postsecondary Occupational Education Programs

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	61.54%	7.69%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	38.46%	30.77%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	38.46%	15.38%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	69.23%	7.69%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	38.46%	15.38%
0- 6	Students may require greater time to master competencies in a CBI system.	69.23%	7.69%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	46.15%	53.85%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	84.62%	7.69%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	46.15%	46.15%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	53.85%	46.15%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	53.85%	46.15%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	61.54%	15.38%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	53.85%	23.08%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	61.54%	15.38%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	53.85%	15.38%
I- 2	Many inservice, workshops, and conferences are not competency-based.	53.85%	00.00%
I- 3	State approved teacher education programs are not competency-based.	46.15%	30.77%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	30.77%	38.46%
I- 5	Faculty have insufficient knowledge of CBI.	53.85%	15.38%
I- 6	Faculty believe CBI will make new demands on their time.	69.23%	7.69%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	38.46%	15.38%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	30.77%	7.69%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development,but lack skill.	53.85%	7.69%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	61.54%	15.38%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	15.38%	7.69%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	69.23%	7.69%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	61.54%	23.08%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	46.15%	30.77%
M- 4	Facilities are not appropriate for CBI.	38.46%	15.38%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	69.23%	15.38%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	23.08%	38.46%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	61.54%	30.77%

TABLE 95

Barriers to the Implementation of Competency-Based Instruction as Perceived by Instructors in the Vocational Home Economics Area of Postsecondary Occupational Education Programs

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	65.00%	0.00%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	50.00%	10.00%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	40.00%	5.00%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	55.00%	20.00%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	40.00%	30.00%
0- 6	Students may require greater time to master competencies in a CBI system.	40.00%	30.00%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	45.00%	40.00%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	75.00%	5.00%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	55.00%	25.00%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	55.00%	30.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	60.00%	20.00%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	55.00%	10.00%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	55.00%	10.00%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	65.00%	15.00%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	60.00%	10.00%
I- 2	Many inservice, workshops, and conferences are not competency-based.	65.00%	5.00%
I- 3	State approved teacher education programs are not competency-based.	50.00%	25.00%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	70.00%	10.00%
I- 5	Faculty have insufficient knowledge of CBI.	70.00%	00.00%
I- 6	Faculty believe CBI will make new demands on their time.	80.00%	00.00%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	60.00%	5.00%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	40.00%	20.00%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development,but lack skill.	45.00%	5.00%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	85.00%	5.00%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	35.00%	15.00%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	55.00%	15.00%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	45.00%	25.00%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	65.00%	15.00%
M- 4	Facilities are not appropriate for CBI.	50.00%	25.00%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	60.00%	5.00%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	50.00%	25.00%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	50.00%	30.00%

TABLE 96

Barriers to the Implementation of Competency-Based Instruction as Perceived by Instructors in the Computer and Information Services Area of Postsecondary Occupational Education Programs

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0- 1	Faculty are not provided release time needed to develop CBI system format.	70.59%	9.80%
0- 2	These institutions do not have specialists trained in CBI systems to assist faculty.	56.86%	19.61%
0- 3	Students are expected to complete occupational preparation programs (or courses) in a specified number of hours.	58.82%	11.76%
0- 4	Traditional college procedures do not permit students to enter and complete programs with the flexibility possible with a CBI system.	58.82%	15.69%
0- 5	It is difficult to schedule students and facilities needed when using a CBI system.	54.90%	23.53%
0- 6	Students may require greater time to master competencies in a CBI system.	58.82%	21.57%
0- 7	CBI programs with open entry/open exit do not match institutional methods for determining funding.	50.98%	47.06%
0- 8	Faculty have little access to clerical help needed for CBI development, implementation, and maintenance.	70.59%	13.73%
0- 9	The staff of the Community and Technical College Division of the Coordinating Board has not reached consensus about Competency-Based Instruction.	41.18%	47.06%
0-10	Guidelines and policies of the Texas Higher Education Coordinating Board communicate mixed messages to local institutions of the Coordinating Board's commitment and direction relative to CBI.	45.10%	45.10%

	Barriers:	Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
0-11	There is a lack of a comprehensive State plan and methodology for the implementation of CBI.	58.82%	35.29%
0-12	Local administrators do not provide sufficient supportive resources needed to encourage faculty participation in CBI.	39.22%	35.29%
0-13	Faculty are not aware of opportunities to learn the skills needed to implement CBI.	56.86%	11.76%
0-14	CBI requires students who are mature and self-directed and who can assume responsibility for his/her own learning or occupational skills.	56.86%	25.49%
I- 1	Difficulty in getting faculty and institution to accept demands of CBI characteristics.	49.02%	29.41%
I- 2	Many inservice, workshops, and conferences are not competency-based.	54.90%	27.45%
I- 3	State approved teacher education programs are not competency-based.	29.41%	58.82%
I- 4	CBI system not perceived by faculty as an improvement over the existing system for delivery of instruction.	49.02%	29.41%
I- 5	Faculty have insufficient knowledge of CBI.	66.67%	9.80%
I- 6	Faculty believe CBI will make new demands on their time.	72.55%	17.65%
I- 7	Faculty express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	45.10%	29.41%
I- 8	Administrators express a negative attitude about CBI and fail to conceptually support its development and/or fail to demonstrate and/or commit to goals of CBI.	25.49%	29.41%

Barriers:		Percent of Respondents Agreeing This Is A Barrier	Percent Of Respondents Who Did Not Know If This Was A Barrier
I- 9	Faculty have responsibility for CBI program development,but lack skill.	52.94%	15.69%
I-10	Teacher education programs do not adequately prepare faculty to use a CBI system.	50.98%	33.33%
I-11	Faculty fears that the CBI system may result in the loss of his/her position.	7.84%	33.33%
M- 1	Institutions find it difficult to obtain/maintain appropriate equipment required for CBI.	43.14%	31.37%
M- 2	Institutions have difficulty in keeping CBI instructional materials current.	50.98%	37.25%
M- 3	There are few, if any, state-provided incentives to institutions' administrators and faculty for implementing and maintaining a CBI system.	52.94%	37.25%
M- 4	Facilities are not appropriate for CBI.	41.18%	23.53%
M- 5	Printing, storing, and distributing individualized instructional materials require greater resources than do conventional programs.	66.67%	19.61%
M- 6	CBI programs require more advanced teaching technology that is difficult to obtain and maintain.	31.37%	33.33%
M- 7	State funding for educational instruction is not sufficient for CBI programs.	58.82%	29.41%

A MODEL FOR EVALUATING COMPETENCY-BASED INSTRUCTION

University of North Texas

June 1993

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Prepared for
The Texas Higher Education Coordinating Board

by
Bill E. Lovelace

School of Merchandising and Hospitality Management
University of North Texas

June 1993

I. Introduction

During the past forty years the national cost of education has increased at a rate three times as fast as the Gross National Product. With educational and training enrollment increasing more rapidly than the population, the cost per student is increasing faster than the appraised value of taxable property. In addition to the present trends of education for all three has been a significant effort made to recover a large population of individuals who have dropped out of the educational process at an early age and those individuals who must be upgraded in order maintain their present position in the workplace. These trends lead to rapidly increasing taxes for education at the local, state, and federal level.

With growing demand for additional resources for education and taxpayers reluctance to provide more funds brings about the need for accountability. Educators can no longer afford to make plans and set objectives without taking into consideration the need for accountability to demonstrate to the funding source that the funding source is receiving a quality product for the funds provided.

Efforts have been made at the local, state, and national level to design performance accountability systems. In the summer of 1987, the U.S. Department of Education initiated a series of studies and work groups to address the problem of accountability in education. The creation of responsible and responsive accountability systems was assigned to the Office of Educational Research and Improvement (OERI) of the U.S.D.O.E., by the Secretary of Education. A study group was created to address the problem of accountability. The Report of the OERI State Accountability Study Group was completed in the fall of 1988.

The study group not only reviewed the need and process for designing an accountability system, they also studied the role of state and federal agencies in providing oversight or technical assistance in developing and implementing accountability systems. The OERI reports stated: "Inherent in the concept of accountability is the notion of oversight — monitoring to ensure that public monies are spent in ways that produce acceptable levels of education performance." Monitoring, as used in relation to accountability, is different than the use of monitoring for compliance. Monitoring or oversight for educational programs or projects conducted under grant or contract has included technical assistance to the local project manager by the federal project program officer or by a state staff advisor.

Past research and experience clearly demonstrates the need for focused technical assistance. It has been determined that the relative effectiveness of different forms of assistance, when tied to accountability and performance, is still largely unknown. It was concluded by the OERI study group that: "If state recognition of performance rests upon an application process, the state agency should offer technical assistance...." This would be especially true when a local community college has set its own goals and performance measures for the delivery of a specified product or service.

The Perkins Act (PL 101-392) mandates accountability by requiring recipients of Title II C funds to evaluate themselves on an annual basis using performance measures and standards established by the State Board for Vocational Education. If the results of the local evaluation indicates that local programs are not making sufficient progress in meeting the standard established by the State, the local recipients of Perkins funds are required to develop and implement a plan for the improvement of the program(s).

The state agency responsible for the administration of Perkins funds also has an implied responsibility of accountability for State programs and leadership activities designed to improve local programs on a statewide basis. This accountability can be achieved by formative evaluation or assessment.

The Texas Higher Education Coordinating Board supports the use of competency-based instruction to achieve accountability. The use of a competency-based instruction system to deliver a competency-based curriculum is supported by mandate and implied mandate. The Technical and Vocational Program Guidelines disseminated by the Texas Higher Education Coordinating Board provides the following definition of competency-based instruction (competency-based education);

> Competency-based education is designed to teach job related clusters of skills and knowledge, the mastery of which forms the basis upon which the student is evaluated; competency-based programs must possess the following characteristics.
>
> 1. Involvement of business and industry in the determination of the job competencies and the expected performance level required for successful employment within a defined job or cluster of jobs.
>
> 2. Course sequence which allows the mastery of competencies leading to the satisfactory performance of all identified competencies.

II. The Evaluation Process

Evaluation is the collection and reporting of data that can be used in making decisions for planning and determining accountability. Evaluation is a process that is designed to provide information in a formative or summative mode for management decisions. The primary focus of formative evaluation (assessment) in education is to determine for planning purposes the status of an educational system or a specific component or process within an educational system.

Formative evaluation or assessment is normally done by collecting data that are quantitative. The assessment is conducted to gather specified information about status and comparing the findings or analyzed status information with predetermined goals, objectives, or characteristics program, component, or process being assessed.

An assessment program or project must include a process for "discrepancy analysis" which will pinpoint the specific purpose for which the assessment is made. The analysis of information collected by the formative evaluation or assessment must be able to identify "what is" and compare the "what is" to the "what should be" or desired status that is described by characteristics or measures of prestated goals and objectives.

In the development and implementation of an assessment activity or program, the planners must define their terms very carefully and specify the purposes of the assessment to be conducted. Before any assessment activities are planned, there are two important assumptions that should be considered.

One assumption that can be made is that the planned assessment can obtain information that is needed and has not been compiled and is not readily available elsewhere. Therefore, the question that becomes important for a specific assessment project is: "Has a methodology been developed and proven to produce the specific information that the proposed assessment project is expected to obtain?"

The second assumption which can be made is that the information obtained by the assessment can and will be used by the decision makers to improve the educational component or process being assessed. The ultimate design of any assessment is dependent upon the specific purpose of the assessment.

Summative evaluation or product evaluation is the best type of evaluation to determine accountability of an occupational preparation program. The types of information collected by product or summative evaluation include:

- student outcomes or achievements as they relate to program standards and objectives
- measures of student progress and outcomes as they relate program standards and instructional objectives

Information collected and analyzed from product evaluation is used primarily to determine if a program should be continued, terminated, or modified. Since one of the decisions that can be made from product evaluation is "modify" the program, process evaluation information should be included in the summative or product evaluation plan.

The requirement for an annual evaluation at the local level by Perkins implies that the evaluation is to be continuous. Therefore, information on measures of student progress will be as important to the local annual evaluation as information on program standards or student outcomes will be in determining program accountability.

The need for including process information in the evaluation plan is emphasized by Alan Ginsburg, who stated:

> *One criticism was that evaluators showed a preoccupation with measuring overall program impacts, particularly test score changes, while achievement outcomes are important, they don't tell the whole story. "Black box" evaluations that ignore program processes are particularly frustrating in that, by themselves, they fail to indicate how to improve poorly performing programs.*[1]

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[1] Ginsburg, Alan et al, Reinvigorating Program Evaluation at the U.S. Department of Education, EDUCATIONAL RESEARCHER, Vol.21, Number 3, April 1992

III. Evaluation Models

The RFA for this project only required the development of a statewide evaluation process or model for determining the extent to which competency-based instruction had been implemented in all public community and technical colleges in Texas. The statewide evaluation process (model) or assessment was developed for the purposes of collecting information that could be used by the staff of the Texas Higher Education Coordinating Board in determining what state leadership activities or technical assistance should be provided to the community and technical colleges for a statewide implementation of a competency-based instruction system.

Concurrent with need for a statewide assessment process there is also a need for an evaluation process or model that can be used at the local institution level to determine the effectiveness of competency-based instruction. The contractor, University of North Texas, proposed, in addition to the state assessment process, to develop a conceptual evaluation model to be used at the institutional level.

The components of the two models are described below:

Statewide Assessment	**Local Evaluation**
• Establish purpose of assessment	• Establish purpose of evaluation
• Assessment Committee	• Evaluation steering committee
• Establish standards for CBI	• Select evaluation criteria
• Establish assessment criteria	• On-site visits
• Develop and mail questionnaires to administrators and faculty	• Steering committee meetings

- Compile and analyze responses
- Perform discrepancy analysis
- Identify strategies and resources to be provided by the state to local institutions for the improvement of CBI
- Conduct interviews with students, faculty, and administrators
- Survey students, faculty, and employers
- Analyze findings
- Report results of evaluation with recommendations for improvement

Model for Statewide Assessment

1. Establish purpose of the assessment

The purpose of this assessment is to determine the extent to which competency-based instruction in technical/vocational education programs have been implemented in all public community and technical colleges.

2. Assessment Committee

For the purpose of the statewide assessment, a project advisory committee was created and is being used.

3. Establish Standards for CBI

Any evaluation must be done in relation to stated goals, objectives, or standards. Since goals, objectives, or standards for competency-based instruction had not been established by the Texas Higher Education Coordinating Board, it became the responsibility of the evaluator to establish characteristics for which evaluative criteria could be developed. The evaluator, the University of North Texas did not feel that it had the prerogative of establishing standards for the State. Therefore, it was decided to establish characteristics of competency-based instruction that could be used to develop or serve as evaluation criteria for the project.

The characteristics were identified with the assistance of the evaluation committee (project advisory committee). The identified characteristics were used in a Delphi study to determine the required characteristics of a competency-based instruction program for this study.

4. Establish assessment criteria

The characteristics determined by the Delphi will serve as the assessment criteria for this assessment.

5. Develop and mail questionnaires to administrators and faculty

(Components 4 through 7 of the conceptual model provides an outline for the plan for piloting the model). The assessment criteria (characteristics) will be used on the survey questionnaire to collect quantitive data.

6. Compile and analyze response

Responses to the survey questionnaires will be entered into computer storage when received. When all questionnaires are returned, a computer analysis will be made of the responses.

7. Perform discrepancy analysis

Following the analysis of the response, a discrepancy analysis will be made. The algorithm for the discrepancy analysis is:

WHAT SHOULD BE ± WHAT IS = DISCREPANCY
(goals and objectives) (present condition)

Since goals and objectives have not been specifically stated by the Coordinating Board, the characteristics of CBI established by the Delphi will serve as "What Should Be." The present condition of "What Is" will be the findings of the assessment. The "Discrepancy" will be the difference between a 100 percent implementation and the results of the assessment.

8. Identify strategies and resources and make recommendations to the Coordinating Board for the increased implementation of competency-based instruction on a statewide basis

Model for Local Evaluation

1. Establish purpose of evaluation

Most evaluations are conducted to determine program effectiveness in terms of the purpose of the program. The purpose of the program defines the expectations of the program in terms of use of funds, populations to be served, and services or products to be provided to the populations being served.

If the purpose of the local evaluation is to determine the extent to which a competency-based instruction system has been implemented, the institution should use the state assessment model. The only exception in using the state assessment model at the institutional level is the survey procedure. At the institutional level, both surveys and interviews should be conducted with students, faculty, and administrators.

2. Evaluation steering committee

The steering committee should be composed of persons representatives of those groups affected by the competency-based instructional program: faculty, administrators, business and industry, and when appropriate, students. The normal role of the steering committee is to assist and advise in the evaluation process and to make recommendations to the appropriate administrative body based on the findings of the evaluation. For the annual local evaluation, the steering committee may also serve as the evaluators of the program(s). Specifically the steering committee should address the following questions in developing the evaluation plan or scope of works to be performed:

1. Purpose:

    a. Is the evaluation being conducted to demonstrate accountability of the program(s) to the public for specified outcomes and results?

    b. Is the evaluation being conducted to determine the need for improvement of institutional procedures and activities?

2. What program is to be evaluated?

3. Types of evaluation:

    a. Will the evaluation be internal or external?

    b. Will there be active or passive involvement by college personnel?

4. Evaluators:

    a. Who is to conduct the evaluation?

    b. What will be the roles and responsibilities of the evaluators?

    c. To what extent will there be an emphasis on formal evaluation designs using control groups and multiple criteria for measuring change?

5. What types of information are to be collected for each evaluative criterion, program standard, or measure?

6. Inquiring methods:

    a. What will be the emphasis on documents analysis, interviews, surveys?

    b. What will be the emphasis on observation?

7. What will be the emphasis on quantitive and qualitative analysis of data collected?

8. Who are the targeted audiences for the dissemination of the evaluation results?

3. Selection of evaluation criteria

Perkins (PL 101-392) provides a very good design for accountability using annual evaluations. Perkins requires that applicants for Perkins funds "describe the program evaluation standards the applicant will use to measure its progress." Perkins requires that each recipient of financial assistance under part C of title II shall evaluate the effectiveness of the program(s) based on the core standards and measures established by the state agency administering the Perkins funds. The institution receiving Perkins funds must annually evaluate its technical/ vocational programs in terms of:

1. Progress
2. Effectiveness
3. Core standards and measures established by the Texas Higher Education Coordinating Board. The local institution has the prerogative of using additional standards and measures which they feel will assist the institution in better meeting the goals of the institution, the needs of students, and the needs of business and industry to be more competitive in the world economy.

It is suggested that the core standards and performance measures established by the State be used in developing evaluation criteria for determining program effectiveness.

It will be the responsibility of the local institutions to develop evaluation criteria or measures and standards for evaluating or measuring progress.

A "Measure" as defined by Perkins is "a description of an outcome." A "Standard" as defined by Perkins is "the level or rate of an outcome."

The word "outcome" as defined in WEBSTER'S DICTIONARY means "something that follows as a result or consequence." The EDUCATIONAL DICTIONARY, 1973, defines "outcome" as "change in behavior resulting from learning; not to be confused with objective, which is a desired result."

If by definition an outcome is something that follows as a result or consequence, then a measure as defined by Perkins must be written in performance terms if it is to be used in evaluating progress or effectiveness. In developing criteria for summative evaluation of competency-based technical programs, it is recommended that both process evaluation and product evaluation be used in determining both progress and effectiveness of the program.

Measures and standards for progress evaluation may be written for program and students in conducting the evaluation. Therefore, using Perkins definitions, the outcome or measure should be written in terms of what is expected of: (1) the students in relation to progress or competency attainment or (2) the program in relation to goals and objectives.

There are several areas or components that should be considered when developing local standards and measures for evaluating progress of students in a competency-based instructional technical program. In most cases, local standards and measures will relate to students progress. However, there are other components that affect students progress and should be considered in the selection of the evaluation criteria.

One of the institutional components that indirectly affect student progress or outcomes is student readiness to benefit from and achieve in the instructional program. Students who enter a program may not be routinely tested for communication, computational, and other skills that are prerequisites for the program or sequential courses of the program. These pre-enrollment assessments are necessary to ensure that each student is counseled in relation to academic achievements required by the program. The preliminary assessments are also needed to make instructors aware of special needs of students for remediation early in the course. The students performances on a preassessment should establish the criteria for placement in the selected sequence of courses of the program.

Other components or areas that should be considered when developing evaluation standards and measures for progress evaluation include:

- Student orientation
- Instructional procedures
- Instructor role
- Competency exams
- Progress records
- Staff development
- Curriculum development
- Program Advisory Committees
- Community relations

Evaluation based on student outcomes or achievement alone will not provide the information needed for making program improvements. Process information about the components that influence students progress should be included in the evaluation criteria.

4. On - site visits

On-site visits should be made of the program(s) to obtain data by observation and interview. On-site visits made by local evaluation may be formal in nature on a scheduled basis or on an unscheduled "drop-in" basis. The unscheduled on-site visits must comply with all of the institutional policies and procedures for visitation.

5. Steering committee meetings

After the steering committee has been created by appointment, someone other than an administrator should be selected to chair the committee. It will then be the responsibility of the chair to ensure that:

- The committee has a published schedule of meetings and agenda items
- The committee has appropriate representative membership
- The plan or purpose of work for the evaluation is agreed upon by the committee; and
- Minutes of the meetings are available for review

6. Conduct interviews with students, faculty, and administrators

All of the data that needs to be collected during the evaluation cannot be effectively obtained by questionnaires. Information that is pertinent to the evaluation cannot always be obtained by the use of a "forced choice" on a survey form. Structured interviews should be developed and conducted to collect such desirable and useful data. The structured interviews may be conducted in person and/or by telephone.

7. Survey students, faculty, and employers

A major task in surveying for information is the selection or development of survey instruments appropriate for the data to be collected. Two factors related to this task are the: (1) selected standards and measures associated with people, program(s), and organizational structure, which are the sources for data collection; and (2) format of the instruments appropriate for specific information required for evaluation. Surveying involves the procedures of collecting and recording data.

As a minimum, collection, procedures include:

1. Observation — Educational researchers use direct observation to study or obtain information about the behaviors and interactions of students and faculty within the education environment.

2. Questioning — Questioning is a means of collecting information by asking individuals about the measures being used in the evaluation. Questioning may also be used to determine knowledge about instructional content, processes, products, and perceptions.

3. Documentary Analysis — This data collection procedure focuses on activities that have occurred prior to the evaluation being conducted. Documents that may be used for sources of data in educational evaluation include: local, state, and federal reports; student records; class records; and program records.

After the data collection procedures have been determined for the survey instrument format, then the type of recording procedure must be selected. Data to be collected for each measure or survey item may be recorded descriptively or numerically. Data recorded by description are qualitative and no attempt is made to assign a value to the properties described.

Numerically recorded or defined data requires the assignment of numerical values to each measure or statement on the survey form. Numerical values are determined through measurement using some type of scale with specific definitions of the scale.

The survey instruments may be designed using a single collection procedure and a single recording procedure. The instruments may be designed to use any combination of the three collection procedures and the two recordings procedures described above.

The survey procedures and formats previously described may be used to collect and analyze: instructional materials and procedures; students progress and attainment of competencies, populations served, and other program records and documents.

8. Analyze findings

The term "analysis" may be used in at least two different ways when referring to findings of the evaluation study. "Computer analysis" is the performance of mathematical and statistical procedures for the treatment of numerical data.

The "visual analysis" of findings is performed by a review of all of the compiled data that are recorded for purposes of interpretation. The data collected and reported by the established measures (evaluative criteria) are compared with the established standards for the program or student progress and competency achievement.

Basically the analysis of the findings for program evaluation follows the procedure of discrepancy analysis. The discrepancy analysis shows the difference in "what is" and the established "what should be."

If mathematical/statistical procedures are to be performed on the data collected by a survey instrument, the procedures should be selected prior to finalization of the format of the survey form.

9. Reporting evaluation results

The design of the report should be completed prior to any data collection. The design of the report may influence the type of data to be collected and how data are collected. The report should:

- Address the purpose of the evaluation;
- Have a format that is directed to the targeted audience(s);
- Present the results or findings of the evaluation in an attractive and informative display, and with a narrative that is clear and

easily understood by the intended audience; and

- Include a section on conclusions and recommendations.

It is recommended that an executive summary of the report be developed for dissemination to certain audiences. The executive summary should be of no more than ten pages in length and list the key findings and recommendations stated in the report.

Oral reports, especially when presented with professionally prepared transparencies, can highlight the key findings, conclusions, and recommendations. The oral report provides an opportunity for immediate feedback. It also provides the opportunity for clarifications in response to questions from the audience and positive public relations that result from personal interchanges of information.